

Cisco Unified Cisco Unified CallManager Release 5.0-PBX Interoperability: Hicom 330E Release 3.1 PBX to a Cisco 3745 QSIG with MGCP

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Introduction

This is an application note for connectivity of Siemens Hicom 330E Release 3.1 PBX with Cisco Unified Cisco Unified CallManager Release 5.0 via Cisco 3745 w/ VWIC-2MFT-E1 as MGCP gateway using ISO QSIG protocol.

The network topology diagram (Figure 1) shows the test setup for end-to-end interoperability with the Cisco Unified Cisco Unified CallManager connected to the PBX via Cisco 3745 w/ VWIC-2MFT-E1 link as MGCP gateway.

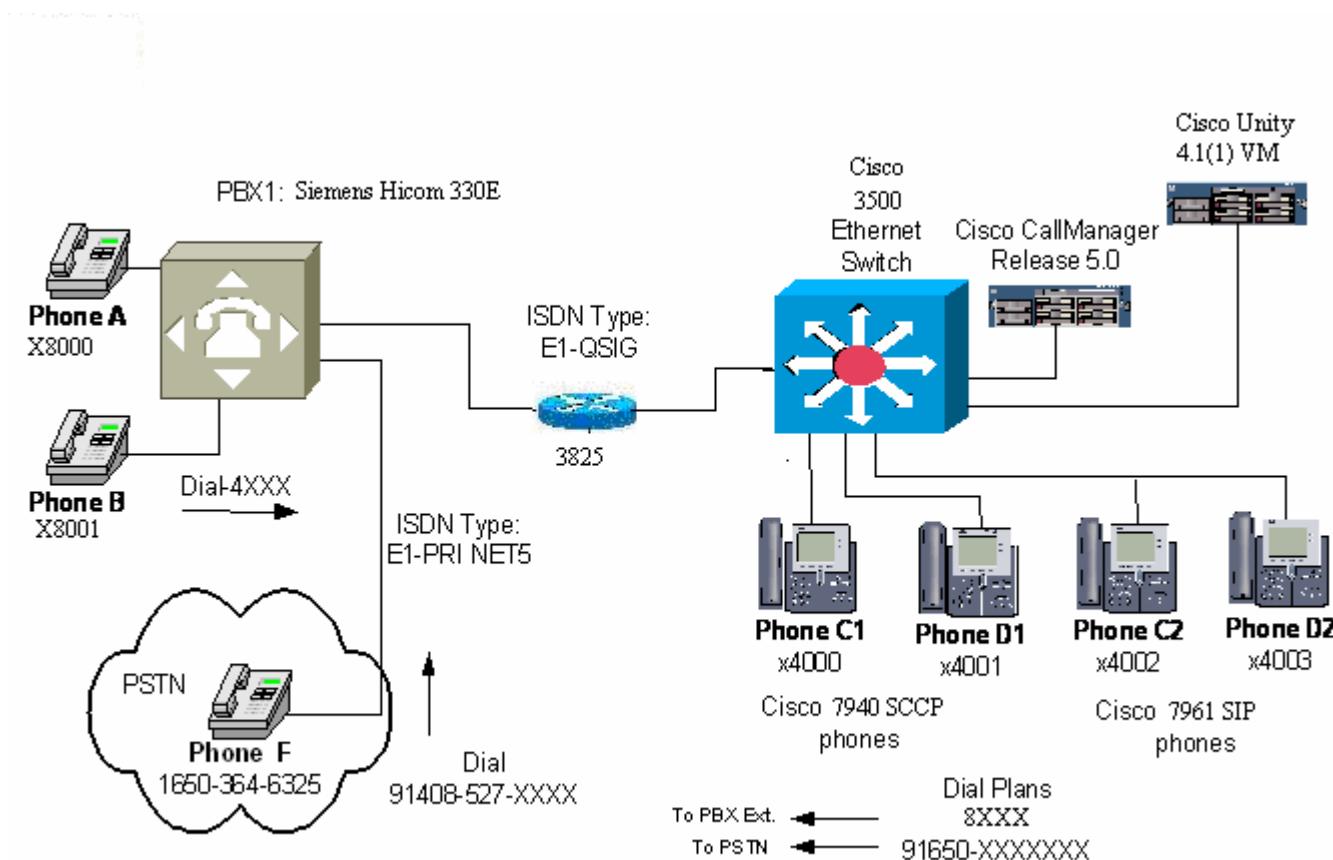
Connectivity is achieved by using the PRI QSIG E1 protocol type on the MGCP gateway with Cisco Unified CallManager Service parameter QSIG variant of ISO and PSS1V2 switch type on the Hicom 330E PBX.

This Application Note uses the Cisco 3745 w/ VWIC-2MFT-E1 voice gateway, however other Cisco voice gateways are also an option to use since Cisco Unified CallManager QSIG implementation does not depend on the physical interface.



Network Topology

Figure 1. Basic Call Network Topology



Limitations

B-Channel Mapping

Siemens Hicom 330E PBX uses sequential channel numbering (1-30) when QSIG protocol “PSS1V2” is selected, therefore the Cisco 3745 Gateway configuration for **Channel IE Type** field should be set to **Continuous Number**.

Connected Name and Number Restrictions

Siemens phone displayed dialed number and trunk name when CCM sends Connected Name and Number as restricted.

Additional Network Feature Path Replacement for Call Diversion

Siemens Hicom 330E PBX does not send Path Replacement proposal for Call Diversion by forward switching.

MWI



When Cisco Unified Cisco Unified CallManager is the Message Center PINX, Siemens Hicom 330E PBX requires the CLI (Calling Line Identification) for Voicemail Message Center in the incoming MWI setup message in order to correctly signal MWI. Current Cisco Unified Cisco Unified CallManager Q.SIG MWI implementation however does not send the CLI in the MWI setup message because it's optional in the Q.SIG standard. Since Siemens Hicom 330E Q.SIG MWI implementation requires the CLI as mandatory information, Cisco Unified Cisco Unified CallManager will not interoperate with the Hicom 330E PBX.

Overlap Sending

When CCM is configured for Overlap Sending calls made from SIP Phones C2 or D2 (Fig 1) to Siemens Hipath result in the Name and Number not being updated on the SIP phones (Siemens has been verified to be sending both Alerting Name and Connected Name and Number). This interoperability issue is considered a limitation on Cisco Unified CallManger and an internal corrective action bug fix ticket known internally as DDTs has been generated to resolve this issue in future releases. (DDTs # CSCse36865 Title: Name and Number not updating on SIP Phone when using Overlap sending).

System Components

Hardware Requirements

Cisco Hardware

Cisco 3500 switch

Cisco 3745 Gateway

Cisco Unified CallManager Server

Siemens Hicom 330E PBX Hardware:

DIU-N2

Software Requirements

Cisco Unified CallManager Release 5.0

Siemens Hicom 330E Release 3.1

Cisco IOS Release (for the gateway)

Features

Features Supported

CLIP-Calling Line (Number) Identification Presentation

CLIR-Calling Line (Number) Identification Restriction

CNIP-Calling Name Identification Presentation

CNIR-Calling Name Identification Restriction

COLP-Connected Line (Number) Identification Presentation

COLR- Connected Line (Number) Identification Restriction (see limitations section)

CONP-Connected Name Identification Presentation



CONR- Connected Name Identification Restriction (see limitations section)

Sending Alerting Name

CT-Call Transfer (by join)

CFU-Call Forwarding Unconditional (by join)

CFB-Call Forwarding Busy (by join)

CFNR-Call Forwarding No Reply (by join)

CFU-Call Forwarding Unconditional (by Reroute)

CFB-Call Forwarding Busy (by Reroute)

CFNR-Call Forwarding No Reply (by Reroute)

CCBS-Call Completion to Busy Subscriber

CCNR-Call Completion No Reply

ANF-PR-Additional Network Feature Path Replacement (for Call Transfer by join)

ANF-PR-Additional Network Feature Path Replacement (for Call Diversion by forward switching) (see limitations section)

ANF-PR-Additional Network Feature Path Replacement (for Trombone connection)

Features Not Supported

MWI- Message Waiting Indication (lamp ON, lamp OFF) 1

Configuration

Configuring the Siemens Hicom 330E PBX

1. Add the new access code to Dialing Plans using WABE + LDPLN.
2. Add the new trunk board using BCSU.
3. Configure Class of Trunk using COT.
4. Configure Class of Parameter for device handler using COP.
5. Configure Class of Service using COSSU.
6. Add the new trunk group access code using BUEND.
7. Configure trunk using TDCSU.
8. Configure Reference Clock using REFTA.
9. Configure trunk Least Cost Routing using LDAT + RICHT.
10. Configure LCR Out-dial Rules using LODR.
11. Enable In-Band DTMF signaling for the Digital Stations using SBCSU.
12. Configure Digital Station for MWI application.
13. Configure Message Center's Service Access Number for MWI application.
14. Configure Digital Station's Class of Service for Mailbox MWI application.

¹ MWI was tested with CallManager 5.0 as the Message Center PINX (also see Limitations MWI).



Configuration Menus and Commands for Hicom 330E

DPLN

```
<dis-wabe:gen;
DIS-WABE:GEN;
H500: AMO WABE STARTED
```

DIGIT INTERPRETATION		VALID FOR ALL DIAL PLANS			
CODE		CALL PROGRESS STATE 1 11111 11112 22	DIGIT ANALYSIS	RESERVED/CONVERT	
		0 12345 67890 12345 67890 12	RESULT	DNI/ADD-INFO *=OWN NODE	
001	- 010	*	NETRTE		
1000		.....	STN		
		*****		DESTNO	25
		*****		DNNO	0- 0- 25
11		.....	MBKY		
111		*****	TIE		
222		*****	OWNNODE		
3000	- 3010	*****	STN		
		*****		DESTNO	33
		*****		DNNO	0- 0-333
3011	- 3020	*****	STN		
		*****		DESTNO	43
		*****		DNNO	0- 0-444
3021	- 3030	*****	STN		
		*****		DESTNO	53
		*****		DNNO	0- 0-445
DIGIT INTERPRETATION		VALID FOR ALL DIAL PLANS			
CODE		CALL PROGRESS STATE 1 11111 11112 22	DIGIT ANALYSIS	RESERVED/CONVERT	
		0 12345 67890 12345 67890 12	RESULT	DNI/ADD-INFO *=OWN NODE	
3031	- 3040	.....	STN		
		*****		DESTNO	63
		*****		DNNO	0- 0-446
3041	- 3050	.....	STN		
		*****		DESTNO	73
		*****		DNNO	0- 0-447
3051	- 3060	.....	STN		
		*****		DESTNO	83
		*****		DNNO	0- 0-448
32		.....	TIE		
34	- 36	.....	TIE		
39		.....	TIE		
4000	- 4050	.....	STN		
		*****		DESTNO	111
		*****		DNNO	0- 0-111
DIGIT INTERPRETATION		VALID FOR ALL DIAL PLANS			
CODE		CALL PROGRESS STATE 1 11111 11112 22	DIGIT ANALYSIS	RESERVED/CONVERT	
		0 12345 67890 12345 67890 12	RESULT	DNI/ADD-INFO *=OWN NODE	
4051	- 4599	.....	STN	R	
		*****		DESTNO	0
		*****		DNNO	0- 0-222*
4700	- 4999	.....	STN	R	
		*****		DESTNO	0
		*****		DNNO	0- 0-222*
5000	- 5009	.....	STN		
		*****		DESTNO	55



5010		. .**** * .**** * *...	ATNDIND	DNNO	0-	0-	55
5011	- 5020	. .**** * .**** * *...	STN	R			
				DESTNO	55		
				DNNO	0-	0-	55
5021	- 5050	. .**** * .**** * *...	STN	DESTNO	111		
				DNNO	0-	0-	111
5051		. .**** * .**** * *...	ATNDIND				

DIGIT INTERPRETATION			VALID FOR ALL DIAL PLANS				
<hr/>							

CODE	CALL PROGRESS STATE			DIGIT ANALYSIS RESULT	RESERVED/CONVERT		
	1	11111	11112 22		DNI/ADD-INFO	* = OWN NODE	
0	12345	67890	12345 67890 12				

5500	- 5501	. .**** * .**** * *...	STN	DESTNO	56		
				DNNO	0-	0-	560
555		. .**** * .**** * *...	TIE				
560		. .**** * .**** * *...	TIE				
6000		. .**** * .**** * *...	STN	DESTNO	33		
				DNNO	0-	0-	333
7000	- 7002	. .**** * .**** * *...	STN	DESTNO	56		
				DNNO	0-	0-	560
79		. .**** * .**** * *...	TIE				
8000	- 8019	. .**** * .**** * *...	STN	DESTNO	0		
				DNNO	0-	0-	222*

DIGIT INTERPRETATION			VALID FOR ALL DIAL PLANS				
<hr/>							

CODE	CALL PROGRESS STATE			DIGIT ANALYSIS RESULT	RESERVED/CONVERT		
	1	11111	11112 22		DNI/ADD-INFO	* = OWN NODE	
0	12345	67890	12345 67890 12				

8020		. .**** * .**** * *...	STN	R			
				DESTNO	0		
854		. .**** * .**** * *...	NETW	R	DNNO	0-	0-222*
				DESTNO	2		
9		. .**** * .**** * *...	TIE		DNNO	0-	0-0-0
*66		. . . . *	SIGNON				
*91		. . . . *	MBOFF				
#66		. . . . *	SIGNOFF				
#91		. . . . *	MBON				
##22		. . . . . . . . *	DAKY				
##24		. . . . . . . . *	DSSKY				
##25		. . . . . . . . *	FWDKY				
##26		. . . . . . . . *	HTKY				
##27		. . . . . . . . *	KNOVRKY				
##28		. . . . . . . . *	MBKY				

DIGIT INTERPRETATION			VALID FOR ALL DIAL PLANS				
<hr/>							

CODE	CALL PROGRESS STATE			DIGIT ANALYSIS RESULT	RESERVED/CONVERT		
	1	11111	11112 22		DNI/ADD-INFO	* = OWN NODE	
0	12345	67890	12345 67890 12				

##29		. . . . . . . . *	MSGRKY				
##35		. . . . . . . . *	TIMEKY				
##36		. . . . . . . . *	VCKY				
##37		. . . . . . . . *	VCRKY				
##38		. . . . . . . . *	CCKY				



##39	.....*	CONFKY
##41	.....*	NAMEKY
##42	.....*	PARKKY
##43	.....*	REMKY
##44	.....*	STKY
##45	.....*	CBKKY
##46	.....*	CONSKY
##47	.....*	DNDKY
##48	.....*	EXHOLDKY
##49	.....*	HOLDKY
##50	.....*	IUSEKY
##51	.....*	LNRKY

DIGIT INTERPRETATION VALID FOR ALL DIAL PLANS

CODE	CALL PROGRESS STATE		DIGIT	RESERVED/CONVERT
	1	11111 11112 22		DNI/ADD-INFO
0 12345 67890 12345 67890 12			RESULT	*=OWN NODE

##52	.....*	PRIVKY
##53	.....*	RLSKY
##54	.....*	SNRKY
##55	.....*	TRNSKY
##56	.....*	RCTOFFKY
##57	.....*	TOGGLEKY

AMO-WABE -111 DIALLING PLANS, FEATURE ACCESS CODES

DISPLAY COMPLETED;

DIS-WABE:GEN;

H500: AMO WABE STARTED

DIGIT INTERPRETATION VALID FOR ALL DIAL PLANS

CODE	CALL PROGRESS STATE		DIGIT	RESERVED/CONVERT
	1	11111 11112 22	ANALYSIS	DNI/ADD-INFO
0 12345 67890 12345 67890 12			RESULT	*=OWN NODE

0	.....*	CO	R
001 - 009	*	NETRTE	
111	.....*	TIE	
12	.....*	TIE	R
13 - 14	.....*	TIE	
21	.....*	KNOVRKY	
22	.....*	DNDKY	
222	.....*	TIE	
23	.....*	FWDKY	
24	.....*	MBKY	
25	.....*	MSGRKY	
26	.....*	DAKY	
27	.....*	DSSKY	
28	.....*	VCRKY	
29	.....*	VCKY	
30	.....*	CONFKY	

DIGIT INTERPRETATION VALID FOR ALL DIAL PLANS

CODE	CALL PROGRESS STATE		DIGIT	RESERVED/CONVERT
	1	11111 11112 22	ANALYSIS	DNI/ADD-INFO
0 12345 67890 12345 67890 12			RESULT	*=OWN NODE

3000 - 3010	.....*	STN	DESTNO 30
			DNNO 0- 0-222
3011 - 3020	.....*	STN	DESTNO 31
			DNNO 0- 0- 31



DIGIT INTERPRETATION			VALID FOR ALL DIAL PLANS					
CODE	CALL PROGRESS STATE				DIGIT ANALYSIS	RESERVED/CONVERT		
	1	11111	11112	22		DNI/ADD-INFO	*OWN NODE	
	0	12345	67890	12345	67890	12	RESULT	
33	.	.....	.....	.....	*	..	CCKY	
34	.	.....	.....	.....	*	..	HTKY	
35	.	.....	.....	.....	*	..	STKY	
36	.	.....	.....	.....	*	..	REMKY	
36	- 37	.	****	****	**	.....	CO	
38	.	.....	.....	.....	*	..	TIMEKY	
39	.	****	*****	**	.....	*	TIE	
4000	- 4050	.	****	*****	**	.....	STN	
							DESTNO	111
							DNNO	0- 0-111
4051	- 4566	.	****	*****	**	.....	STN	
							DESTNO	222
							DNNO	0- 0-222
4567	.	****	*****	**	.....	*	STN	
							DESTNO	34
							DNNO	0- 0-200

DIGIT INTERPRETATION			VALID FOR ALL DIAL PLANS									
CODE	CALL PROGRESS STATE					DIGIT		RESERVED/CONVERT				
	1	11111	11112	22	ANALYSIS	RESULT	DNI/ADD-INFO			* = OWN NODE		
	0	12345	67890	12345	67890	12						
4568 - 4999	.	*****	*****	**	*	STN		DESTNO	222	
										DNNO	0-	0-222
5000 - 5040	.	*****	*****	**	*	STN		DESTNO	0	
										DNNO	0-	0-555*
5500 - 5501	.	*****	*****	**	*	STN		DESTNO	56	
										DNNO	0-	0-560
555	.	*****	*****	**	*	OWNNODE				
560	.	*****	*****	**	*	TIE				
59	.	*****	*****	**	*	TIE				
6000 - 6009	.	*****	*****	**	*	STN	R	DESTNO	0	
										DNNO	0-	0-555*

DIGIT INTERPRETATION			VALID FOR ALL DIAL PLANS					
CODE	CALL PROGRESS STATE				DIGIT	RESERVED/CONVERT		
	1	11111	11112	22	ANALYSIS	DNI/ADD-INFO		
	0	12345	67890	12345	67890	12	RESULT	*=OWN NODE
7000 - 7002	.	*****	*****	**	STN	
								DESTNO 56
								DNNO 0 - 0-560
8000 - 8050	.	*****	*****	**	STN	



AMO-WABE -111 DIALLING PLANS, FEATURE ACCESS CODES
DISPLAY COMPLETED;

Enbloc Sending Dial Plan, DPLN

```
<DISPLAY-LDPLN:TYPE=LDP , LDPNO=4;  
DISPLAY-LDPLN:TYPE=LDP , LDPNO=4;  
H500: AMO LDPLN STARTED
```

AMO-LDPLN-111 ADMINISTRATION LCR DIALPLAN
DISPLAY COMPLETED;



Access code for Overlap Sending Dial Plan, DPLN

```
<DISPLAY-LDPLN:TYPE=LDP, LDPNO=36-X;
```

```
DISPLAY-LDPLN:TYPE=LDP, LDPNO=12;
```

```
H500: AMO LDPLN STARTED
```

LDPNO : 33	LDP : 36-X	SPC : 22				
	DPLN	LRTE	LAUTH	DPLN	LRTE	LAUTH
0	36	1		8		
1				9		
2				10		
3				11		
4				12		
5				13		
6				14		
7				15		

```
AMO-LDPLN-111      ADMINISTRATION LCR DIALPLAN  
DISPLAY COMPLETED;
```

PSTN Dial Plan, DPLN

```
<DISPLAY-LDPLN:TYPE=LDP, LDPNO=34;
```

```
DISPLAY-LDPLN:TYPE=LDP, LDPNO=5;
```

```
H500: AMO LDPLN STARTED
```

LDPNO : 34	LDP : 9-1650-XXXXXXX	SPC : 22				
	DPLN	LRTE	LAUTH	DPLN	LRTE	LAUTH
0	916	1		8		
1				9		
2				10		
3				11		
4				12		
5				13		
6				14		
7				15		

```
AMO-LDPLN-111      ADMINISTRATION LCR DIALPLAN  
DISPLAY COMPLETED;
```



BCSU

PRI Board

```
<DISPLAY-BCSU:TYPE=TBL,LTG=1,LTU=3,SLOT=73;
DISPLAY-BCSU:TYPE=TBL,LTG=1,LTU=3,SLOT=25;
H500: AMO BCSU STARTED
```

ADDRESS : LTG 1 LTU 3 SOURCE GROUP 1

PEN	ASSIGNED MODULE	MODULE TYPE	FCT ID	HWY BDL	INSERTED MODULE	STATE	HW-INFO	MODULE STATUS
73	Q2196-X	DIU-N2	1	A	Q2196-X	1	-04 -	READY

AMO-BCSU -111 BOARD CONFIGURATION, SWITCHING UNIT
DISPLAY COMPLETED;

<

PSTN board

```
<DISPLAY-BCSU:TYPE=TBL,LTG=1,LTU=2,SLOT=79;
DISPLAY-BCSU:TYPE=TBL,LTG=1,LTU=2,SLOT=79;
H500: AMO BCSU STARTED
```

ADDRESS : LTG 1 LTU 2 SOURCE GROUP 1

PEN	ASSIGNED MODULE	MODULE TYPE	FCT ID	HWY BDL	INSERTED MODULE	STATE	HW-INFO	MODULE STATUS
79	Q2196-X	DIU-N2	1	A	Q2196-X	1	-06 -	READY

AMO-BCSU -111 BOARD CONFIGURATION, SWITCHING UNIT
DISPLAY COMPLETED;

Class of Trunk, COT

```
<dis-cot:4;
DIS-COT:4;
H500: AMO COT STARTED
```

COT: 4 INFO: 4:Q931 EXTERNAL
DEVICE: INDEP SOURCE: DB
PARAMETER:

PRIORITY FOR AC WILL BE DETERMINED FROM MESSAGE	PRI
RECALL IF USER HANGS UP IN CONSULTATION CALL	RCL
TRUNK CALL TRANSFER	XFER
TRUNK SIGNALING ANSWER	ANS
CHANGEOVER FROM HOLD TO RING TONE	CHRT
KNOCKING OVERRIDE POSSIBLE	KNOR
CALL EXTEND FOR BUSY, RING OR CALL STATE	CEBC
NETWORKWIDE AUTOMATIC CALLBACK ON BUSY	CBBN
NETWORKWIDE AUTOMATIC CALLBACK ON FREE	CBFN
DON'T RELEASE CALL TO BUSY HUNT GROUP	BSHT
SEND NO NODE NUMBER TO PARTNER	LWNC
CONNECTION TO ROUTE OPTIMIZATION NODE	ROPT
INCOMING CIRCUIT FROM SYSTEM WITHOUT LCR	NLCR
TSC-SIGNALING FOR NETWORKWIDE FEATURES (MANDATORY)	TSCS
INCOMING CDR BY ZONE OR FROM LINE	ICZL
INCOMING CIRCUIT FROM SYSTEM WITHOUT LCR (DATA)	NLRD
INTERWORKING CALLBACK - NO ANSWER AND MAILBOX CALLBACK	IWCB
AOC PER CALL (AUTOMATICAL OR ON REQUEST), MAND. CORNET-NQ	AOCC
LINE WITH IMPLICIT NUMBERS	LINO
CONTROLLED TRUNK AND LINE SELECTION	CTLS
NO TONE	NTON



```
AMO-COT -111      CLASS OF TRUNK FOR CALL PROCESSING
DISPLAY COMPLETED;
<dis-cot:5;
DIS-COT:5;
H500: AMO COT      STARTED
```

```
COT: 5 INFO: 5:ECMA1 V2.0
DEVICE: INDEP      SOURCE: DB
PARAMETER:
  PRIORITY FOR AC WILL BE DETERMINED FROM MESSAGE          PRI
  RECALL IF USER HANGS UP IN CONSULTATION CALL            RCL
  TRUNK CALL TRANSFER                                     XFER
  TRUNK SIGNALING ANSWER                                 ANS
  CHANGEOVER FROM HOLD TO RING TONE                      CHRT
  KNOCKING OVERRIDE POSSIBLE                            KNOR
  CALL EXTEND FOR BUSY, RING OR CALL STATE              CEBC
  NETWORKWIDE AUTOMATIC CALLBACK ON BUSY                CBBN
  NETWORKWIDE AUTOMATIC CALLBACK ON FREE                CBFN
  DON'T RELEASE CALL TO BUSY HUNT GROUP                BSHT
  CONNECTION TO ROUTE OPTIMIZATION NODE                ROPT
  TSC-SIGNALING FOR NETWORKWIDE FEATURES (MANDATORY)  TSCS
  INCOMING CDR BY ZONE OR FROM LINE                   ICZL
  AOC PER CALL (AUTOMATICAL OR ON REQUEST), MAND. CORNET-NQ  AOCC
  LINE WITH IMPLICIT NUMBERS                           LINO
  NO TONE                                              NTON
```

```
AMO-COT -111      CLASS OF TRUNK FOR CALL PROCESSING
DISPLAY COMPLETED;
```

For Call Forwarding by Reroute need to add FNAN and FWDN to COT4 and 5
For Path Replacement need to add ROPT to COT 4 and 5 on the Hicom 330E.

```
<CHANGE-COT:COTNO=4,COTTYPE=COTADD,PAR=FNAN&FWDN&ROPT;
CHANGE-COT:COTNO=4,COTTYPE=COTDEL,PAR=FNAN&FWDN&ROPT;
```

```
H500: AMO COT      STARTED
```

H07: CHANGED COT STILL LINKED WITH FOLLOWING TRUNKS:

COT	TRUNK	BCGR	DEVICE
4	1- 1- 79-	0 1	S2CONN
	1- 1- 79-	1 1	S2CONN
	1- 2- 25-	0 1	S2CONN
	1- 2- 25-	1 1	S2CONN
	1- 2- 31-	0 1	S2CONN
	1- 2- 31-	1 1	S2CONN
	1- 1- 85-	2	S0CONN
	1- 1- 85-	3	S0CONN
	1- 1- 85-	6	S0CONN
	1- 1- 85-	7	S0CONN
	1- 1- 73-	0 1	S2CONN
	1- 1- 73-	1 1	S2CONN

H06: COT 4 CHANGED

```
AMO-COT -111      CLASS OF TRUNK FOR CALL PROCESSING
CHANGE COMPLETED;
```

```
<CHANGE-COT:COTNO=5,COTTYPE=COTADD,PAR=FNAN&FWDN&ROPT;
CHANGE-COT:COTNO=5,COTTYPE=COTDEL,PAR=FNAN&FWDN&ROPT;
```

```
H500: AMO COT      STARTED
```

H07: CHANGED COT STILL LINKED WITH FOLLOWING TRUNKS:

COT	TRUNK	BCGR	DEVICE
5	1- 1- 79-	0 1	S2CONN
	1- 2- 25-	0 1	S2CONN
	1- 2- 25-	1 1	S2CONN



```
1- 2- 31- 0 1      S2CONN
1- 2- 31- 1 1      S2CONN
1- 1-103- 0 1      CDGCONN
1- 1-103- 1 1      CDGCONN
1- 1- 73- 0 1      S2CONN
```

H06: COT 5 CHANGED

```
AMO-COT -111      CLASS OF TRUNK FOR CALL PROCESSING
CHANGE COMPLETED;
```

```
<dis-cot:4;
DIS-COT:4;
H500: AMO COT STARTED
```

```
COT: 4 INFO: 4:Q931 EXTERNAL
DEVICE: INDEP      SOURCE: DB
PARAMETER:
  PRIORITY FOR AC WILL BE DETERMINED FROM MESSAGE      PRI
  RECALL IF USER HANGS UP IN CONSULTATION CALL      RCL
  TRUNK CALL TRANSFER      XFER
  TRUNK SIGNALING ANSWER      ANS
  CHANGEOVER FROM HOLD TO RING TONE      CHRT
  KNOCKING OVERRIDE POSSIBLE      KNOR
  CALL EXTEND FOR BUSY, RING OR CALL STATE      CEBC
  NETWORKWIDE AUTOMATIC CALLBACK ON BUSY      CBBN
  NETWORKWIDE AUTOMATIC CALLBACK ON FREE      CBFN
  NETWORKWIDE CALL FORWARDING PERMITTED      FWDN
  NETWORKWIDE FORWARDING NO-ANSWER      FNAN
  DON'T RELEASE CALL TO BUSY HUNT GROUP      BSHT
  SEND NO NODE NUMBER TO PARTNER      LWNC
  CONNECTION TO ROUTE OPTIMIZATION NODE      ROPT
  INCOMING CIRCUIT FROM SYSTEM WITHOUT LCR      NLCR
  TSC-SIGNALING FOR NETWORKWIDE FEATURES (MANDATORY)      TSCS
  INCOMING CDR BY ZONE OR FROM LINE      ICZL
  INCOMING CIRCUIT FROM SYSTEM WITHOUT LCR (DATA)      NLRD
  INTERWORKING CALLBACK - NO ANSWER AND MAILBOX CALLBACK      IWCB
  AOC PER CALL (AUTOMATICAL OR ON REQUEST), MAND. CORNET-NQ      AOCC
  LINE WITH IMPLICIT NUMBERS      LINO
  CONTROLLED TRUNK AND LINE SELECTION      CTLS
  NO TONE      NTON
```

```
AMO-COT -111      CLASS OF TRUNK FOR CALL PROCESSING
DISPLAY COMPLETED;
```

```
<dis-cot:5;
DIS-COT:5;
H500: AMO COT STARTED
```

```
COT: 5 INFO: 5:ECMA1 V2.0
DEVICE: INDEP      SOURCE: DB
PARAMETER:
  PRIORITY FOR AC WILL BE DETERMINED FROM MESSAGE      PRI
  RECALL IF USER HANGS UP IN CONSULTATION CALL      RCL
  TRUNK CALL TRANSFER      XFER
  TRUNK SIGNALING ANSWER      ANS
  CHANGEOVER FROM HOLD TO RING TONE      CHRT
  KNOCKING OVERRIDE POSSIBLE      KNOR
  CALL EXTEND FOR BUSY, RING OR CALL STATE      CEBC
  NETWORKWIDE AUTOMATIC CALLBACK ON BUSY      CBBN
  NETWORKWIDE AUTOMATIC CALLBACK ON FREE      CBFN
```



NETWORKWIDE CALL FORWARDING PERMITTED	FWDN
NETWORKWIDE FORWARDING NO-ANSWER	FNAN
DON'T RELEASE CALL TO BUSY HUNT GROUP	BSHT
CONNECTION TO ROUTE OPTIMIZATION NODE	ROPT
TSC-SIGNALING FOR NETWORKWIDE FEATURES (MANDATORY)	TSCS
INCOMING CDR BY ZONE OR FROM LINE	ICZL
AOC PER CALL (AUTOMATICAL OR ON REQUEST), MAND. CORNET-NQ	AOCC
LINE WITH IMPLICIT NUMBERS	LINO
NO TONE	NTON

AMO-COT -111 CLASS OF TRUNK FOR CALL PROCESSING
DISPLAY COMPLETED;

<

Class of Parameter for Device Handler, COP

<DISPLAY-COP:COPNO=4;
DISPLAY-COP:COPNO=4;
H500: AMO COP STARTED

COP: 4 INFO: 4:Q931	
DEVICE: INDEP	SOURCE: DB
PARAMETER:	
LINE WITH END-OF-DIAL	EOD
SPECIAL MODE	SFRM
CODE CALLING RELEASE AFTER EVERY TASK	CCR
REGISTRATION OF LAYER 3 ADVISORIES	L3AR

AMO-COP -111 CLASS OF PARAMETER FOR DEVICE HANDLER
DISPLAY COMPLETED;

Class of Service, COSSU

<DISPLAY-COSSU:TYPE=COS,COS=32;
DISPLAY-COSSU:TYPE=COS,COS=32;
H500: AMO COSSU STARTED

COS	VOICE	FAX	TTX	VTX	DTE
32	>32:TRUNKS				
	TA	NOCO	NOCO	NOCO	TA
	TNOTCR	NOTIE	NOTIE	NOTIE	TNOTCR
					BASIC
					MSN
					CDRINT
					MULTRA

AMO-COSSU-111 CLASSES OF SERVICE, SWITCHING UNIT

DISPLAY COMPLETED;
<DISPLAY-COSSU:TYPE=LCOSV,LCOSV=32;
DISPLAY-COSSU:TYPE=LCOSV,LCOSV=32;
H500: AMO COSSU STARTED

LCOS	LAUTH						LCR
V	1	2	3	4	5	6	OPTS=
	123456789012345678901234567890123456789012345678901234						LCRET
	>SERVICE INFORMATION						LCR
32	XX						.
	>32:TRUNKS						

AMO-COSSU-111 CLASSES OF SERVICE, SWITCHING UNIT



DISPLAY COMPLETED;

Trunk Group Access Code, BUEND

<DISPLAY-BUEND:TGRP=37,FORMAT=L;

DISPLAY-BUEND:TGRP=37,FORMAT=L;

H500: AMO BUEND STARTED

FORMAT = L						
TGRP NUMBER :	37	TGRP NAME :	PRI TEST	MAXIMUM NO. :	30	
CHARCON :	NEUTRAL			TRACENO :	0	
SUBGROUP NO. :	10	DEVICE TYPE :	S2CONN	ACD THRESHOLD :	*	
RESERVED :	N	SEARCH MODE :	CIRCULAR	PRIORITY :	2	
NUMBER OF ASSOCIATED ROUTES :	5					
THE FOLLOWING TRUNKS (LTG-LTU-SLOT-CCT) HAVE BEEN ALLOCATED:						
1- 1- 73-0	B-CHL: 1	1- 1- 73-0	B-CHL: 2	1- 1- 73-0	B-CHL: 3	
1- 1- 73-0	B-CHL: 4	1- 1- 73-0	B-CHL: 5	1- 1- 73-0	B-CHL: 6	
1- 1- 73-0	B-CHL: 7	1- 1- 73-0	B-CHL: 8	1- 1- 73-0	B-CHL: 9	
1- 1- 73-0	B-CHL: 10	1- 1- 73-0	B-CHL: 11	1- 1- 73-0	B-CHL: 12	
1- 1- 73-0	B-CHL: 13	1- 1- 73-0	B-CHL: 14	1- 1- 73-0	B-CHL: 15	
1- 1- 73-0	B-CHL: 16	1- 1- 73-0	B-CHL: 17	1- 1- 73-0	B-CHL: 18	
1- 1- 73-0	B-CHL: 19	1- 1- 73-0	B-CHL: 20	1- 1- 73-0	B-CHL: 21	
1- 1- 73-0	B-CHL: 22	1- 1- 73-0	B-CHL: 23	1- 1- 73-0	B-CHL: 24	
1- 1- 73-0	B-CHL: 25	1- 1- 73-0	B-CHL: 26	1- 1- 73-0	B-CHL: 27	
1- 1- 73-0	B-CHL: 28	1- 1- 73-0	B-CHL: 29	1- 1- 73-0	B-CHL: 30	

AMO-BUEND-111 TRUNK GROUP

DISPLAY COMPLETED;

<DISPLAY-BUEND:TGRP=38,FORMAT=L;

DISPLAY-BUEND:TGRP=38,FORMAT=L;

H500: AMO BUEND STARTED

FORMAT = L						
TGRP NUMBER :	38	TGRP NAME :	ETSI CCM	MAXIMUM NO. :	30	
CHARCON :	NEUTRAL			TRACENO :	0	
SUBGROUP NO. :	9	DEVICE TYPE :	S2CONN	ACD THRESHOLD :	*	
RESERVED :	N	SEARCH MODE :	CIRCULAR	PRIORITY :	2	
NUMBER OF ASSOCIATED ROUTES :	5					
THE FOLLOWING TRUNKS (LTG-LTU-SLOT-CCT) HAVE BEEN ALLOCATED:						
1- 1- 73-1	B-CHL: 1	1- 1- 73-1	B-CHL: 2	1- 1- 73-1	B-CHL: 3	
1- 1- 73-1	B-CHL: 4	1- 1- 73-1	B-CHL: 5	1- 1- 73-1	B-CHL: 6	
1- 1- 73-1	B-CHL: 7	1- 1- 73-1	B-CHL: 8	1- 1- 73-1	B-CHL: 9	
1- 1- 73-1	B-CHL: 10	1- 1- 73-1	B-CHL: 11	1- 1- 73-1	B-CHL: 12	
1- 1- 73-1	B-CHL: 13	1- 1- 73-1	B-CHL: 14	1- 1- 73-1	B-CHL: 15	
1- 1- 73-1	B-CHL: 16	1- 1- 73-1	B-CHL: 17	1- 1- 73-1	B-CHL: 18	
1- 1- 73-1	B-CHL: 19	1- 1- 73-1	B-CHL: 20	1- 1- 73-1	B-CHL: 21	
1- 1- 73-1	B-CHL: 22	1- 1- 73-1	B-CHL: 23	1- 1- 73-1	B-CHL: 24	
1- 1- 73-1	B-CHL: 25	1- 1- 73-1	B-CHL: 26	1- 1- 73-1	B-CHL: 27	
1- 1- 73-1	B-CHL: 28	1- 1- 73-1	B-CHL: 29	1- 1- 73-1	B-CHL: 30	

AMO-BUEND-111 TRUNK GROUP

DISPLAY COMPLETED;



Trunk Configuration, TDCSU

For Master-Side Configuration

```
<DISPLAY-TDCSU: PEN1=1-1-73-0;
DISPLAY-TDCSU: PEN1=1-1-73-0;
H500: AMO TDCSU STARTED
+----- DIGITAL TRUNK (FORMAT=L) -----
|  DEV = S2CONN          PEN = 1-01-073-0
+-----+
|  COTNO = 5             COPNO = 4           DPLN = 0
|  ITR = 0               COS = 32          LCOSV = 32
|  LCOSD = 32            CCT =             DESTNO = 55
|  PROTVAR = PSS1V2      SEGMENT = 1        TCHARG = N
|  SUPPRESS = 0          DGTPR =           CHIMAP = N
|  ISDNCC =              ISDNAC =           ISDNLC =
|  ISDNIP =              ISDNNP =
|  PNPL2C =              PNPL1C =           PNPLC =
|  PNPL2P =              PNPL1P =           PNPAC =
|  TRACOUNT = 31         SATCOUNT = MANY   NNO = 55
|  ALARMNO = 0           FIDX = 1          CARRIER = 1
|  ZONE = EMPTY          COTX = 4           FWDX = 10
|  DOMTYPE =              DOMAINNO =        TPROFNO =
|  INIGHT =
|  CCHDL =              UUSCCX = 16        UUSCCY = 8
+-----+
|  TGRP = 37              SRCHMODE = CIR    BCNEG = N
|  BCGR = 1               INS = Y           LWPAR = 2
|  LWPP = 0               LWLT = 0          LWPS = 0
|  LWR1 = 0               LWR2 = 0
|  BCHAN 1 && 30
+-----+
AMOUNT OF B-CHANNELS IN THIS DISPLAY-OUTPUT: 30
```

AMO-TDCSU-111 DIGITAL TRUNKS
DISPLAY COMPLETED;

```
<DISPLAY-LWPAR:FORMAT=L,BLNO=2,TYPE=DIUS2;
DISPLAY-LWPAR:FORMAT=L,BLNO=1,TYPE=DIUS2;
H500: AMO LWPAR STARTED
```

```
+-----+
|  LOADWARE PARAMETERS      CIRCUIT TYPE: DIUS2  SOURCE:DB  BLOCK: 2 |
+-----+
|  LNTYPE = COPPER          VERSION = S2           QUAL = ON
|  MASTER = Y               DCHAN1 = 16          DCHAN2 = 0
|  PATTERN = D5H             QUAL1 = 10 SEC.    QUAL2 = 10 MIN.
|  SMD = Y                 PERMACT = Y          FCBAB = DFH
|  CDG = N                 FIXEDTEI = 0        CNTRNR = 255
|  TEIVERIF = N             CRC4REP = N
|  DEV = INDEP
|  INFO = 2:COPPER-MASTER CLOCK.(CORNET)
+-----+
```

AMO-LWPAR-111 LOADWARE PARAMETERS FOR NETWORKING MODULES
DISPLAY COMPLETED;



For Slave-Side Configuration

```
<DISPLAY-TDCSU: PEN1=1-1-73-1;  
DISPLAY-TDCSU: PEN1=1-1-73-1;
```

H500: AMO TDCSU STARTED

DIGITAL TRUNK (FORMAT=L)			
DEV = S2CONN	PEN = 1-01-073-1		
COTNO = 4	COPNO = 4	DPLN = 0	
ITR = 0	COS = 32	LCOSV = 32	
LCOSD = 32	CCT = HIPATH S2	DESTNO = 111	
PROTVAR = PSS1V2	SEGMENT = 1	TCHARG = N	
SUPPRESS = 0	DGTPR =	CHIMAP = N	
ISDNCC =	ISDNAC =	ISDNLC =	
ISDNIP =	ISDNNP =		
PNPL2C =	PNPL1C =	PNPLC =	
PNPL2P =	PNPL1P =	PNPAC =	
TRACOUNT = 31	SATCOUNT = MANY	NNO = 111	
ALARMNO = 0	FIDX = 1	CARRIER = 1	
ZONE = EMPTY	COTX = 4	FWDX = 10	
DOMTYPE =	DOMAINNO =	TPROFNO =	
INIGHT =			
CCHDL =	UUSCCX = 16	UUSCCY = 8	
TGRP = 38	SRCHIMODE = CIR	BCNEG = Y	
BCGR = 1	INS = Y	LWPAR = 3	
LWPP = 0	LWLT = 0	LWPS = 0	
LWR1 = 0	LWR2 = 0		
BCHAN 1 && 30			

AMOUNT OF B-CHANNELS IN THIS DISPLAY-OUTPUT: 30

AMO-TDCSU-111 DIGITAL TRUNKS
DISPLAY COMPLETED;

```
<DISPLAY-LWPAR:FORMAT=L,BLNO=0,TYPE=DIUS2;  
DISPLAY-LWPAR:FORMAT=L,BLNO=0,TYPE=DIUS2;  
H500: AMO LWPAR STARTED
```

LOADWARE PARAMETERS CIRCUIT TYPE: DIUS2 SOURCE:DB BLOCK: 3			
LNTYPE = COPPER	VERSION = S2	QUAL = ON	
MASTER = N	DCHAN1 = 16	DCHAN2 = 0	
PATTERN = D5H	QUAL1 = 10 SEC.	QUAL2 = 10 MIN.	
SMD = N	PERMACT = Y	FCBAB = DFH	
CDG = N	FIXEDTEI = 0	CNTRNR = 255	
TEIVERIF = N	CRC4REP = N		
DEV = INDEP			
INFO = 3:COPPER-DERIVE CLOCK(CORNET)			

AMO-LWPAR-111 LOADWARE PARAMETERS FOR NETWORKING MODULES
DISPLAY COMPLETED;



PSTN Trunk Configuration, TDCSU

<DISPLAY-TDCSU: PEN1=1-1-79-1;

DISPLAY-TDCSU: PEN1=1-1-79-1;

H500: AMO TDCSU STARTED

DIGITAL TRUNK (FORMAT=L)			
DEV = S2CONN	PEN = 1-01-079-1		
COTNO = 4	COPNO = 4	DPLN = 0	
ITR = 0	COS = 32	LCOSV = 32	
LCOSD = 32	CCT =	DESTNO = 55	
PROTVAR = ETSI	SEGMENT = 1	TCHARG = N	
SUPPRESS = 0	DGTPR =	CHIMAP = N	
ISDNCC =	ISDNAC =	ISDNLC =	
ISDNIP =	ISDNNP =		
PNPL2C =	PNPL1C =	PNPLC =	
PNPL2P =	PNPL1P =	PNPAC =	
TRACOUNT = 31	SATCOUNT = MANY	NNO = 55	
ALARMNO = 0	FIDX = 1	CARRIER = 1	
ZONE = EMPTY	COTX = 4	FWDX = 10	
DOMTYPE =	DOMAINNO =	TPROFNO =	
INIGHT =			
CCHDL =	UUSCCX = 16	UUSCCY = 8	
TGRP = 71	SRCHMODE = CIR	BCNEG = N	
BCGR = 1	INS = N	LWPAR = 2	
LWPP = 0	LWLT = 0	LWPS = 0	
LWR1 = 0	LWR2 = 0		
BCHAN 1 && 30			

AMOUNT OF B-CHANNELS IN THIS DISPLAY-OUTPUT: 30

AMO-TDCSU-111 DIGITAL TRUNKS

DISPLAY COMPLETED;

Trunk Configuration to HIPATH node, TDCSU

<DISPLAY-TDCSU: PEN1=1-1-73-0;

DISPLAY-TDCSU: PEN1=1-1-73-0;

H500: AMO TDCSU STARTED

DIGITAL TRUNK (FORMAT=L)			
DEV = S2CONN	PEN = 1-01-073-0		
COTNO = 5	COPNO = 4	DPLN = 0	
ITR = 0	COS = 32	LCOSV = 32	
LCOSD = 32	CCT =	DESTNO = 55	
PROTVAR = PSS1V2	SEGMENT = 1	TCHARG = N	
SUPPRESS = 0	DGTPR =	CHIMAP = N	
ISDNCC =	ISDNAC =	ISDNLC =	
ISDNIP =	ISDNNP =		
PNPL2C =	PNPL1C =	PNPLC =	
PNPL2P =	PNPL1P =	PNPAC =	
TRACOUNT = 31	SATCOUNT = MANY	NNO = 55	
ALARMNO = 0	FIDX = 1	CARRIER = 1	
ZONE = EMPTY	COTX = 4	FWDX = 10	
DOMTYPE =	DOMAINNO =	TPROFNO =	
INIGHT =			



CCHDL	=	UUSCCX	= 16	UUSCCY	= 8
TGRP	= 37	SRCHMODE	= CIR	BCNEG	= N
BCGR	= 1	INS	= Y	LWPAR	= 3
LWPP	= 0	LWLT	= 0	LWPS	= 0
LWR1	= 0	LWR2	= 0		
BCHAN	1 && 30				

AMOUNT OF B-CHANNELS IN THIS DISPLAY-OUTPUT: 30

AMO-TDCSU-111 DIGITAL TRUNKS
DISPLAY COMPLETED;

Reference Clock Configuration, REFTA

For Master-Side Configuration

```
<DISPLAY-REFTA:TYPE=CIRCUIT,PEN=1-1-73-0;
DISPLAY-REFTA:TYPE=CIRCUIT,PEN=1-1-73-0;
H500: AMO REFTA STARTED
```

REFERENCE CLOCK CIRCUITS							
PEN	MODULE	DEVICE	PRI	ERROR	BLOCK	SUPP.	READY
1- 1- 73- 0	DIU-N2	S2CONN	0	0	N		N

AMO-REFTA-111 REFERENCE CLOCK TABLE
DISPLAY COMPLETED;

For Slave-Side Configuration

```
<DISPLAY-REFTA:TYPE=CIRCUIT,PEN=1-1-73-1;
DISPLAY-REFTA:TYPE=CIRCUIT,PEN=1-1-73-1;
H500: AMO REFTA STARTED
```

REFERENCE CLOCK CIRCUITS							
PEN	MODULE	DEVICE	PRI	ERROR	BLOCK	SUPP.	READY
1- 1- 73- 1	DIU-N2	S2CONN	11	0	N		N

AMO-REFTA-111 REFERENCE CLOCK TABLE
DISPLAY COMPLETED;



Trunk Least Cost Routing Configuration

LDAT

```
<DISPLAY-LDAT:TYPE=LCR,LROUTE=111;
```

```
DISPLAY-LDAT:TYPE=LCR,LROUTE=111;
```

```
H500: AMO LDAT STARTED
```

LROUTE = 111 LDPLN NAME = ROPT CCM								SERVICE = ALL	
TYPE = LCR								DNNO OF ROUTE = 111	
SERVICE INFO =									
LRTEL	LVAL	TGRP	ODR	LAUTH	SCHEDULE ABCDEFGH	CARRIER	BAND	ZONE	WDTH LATTR
1	1	38	4	1	*****	1	EMPTY	1	NONE
		DNNO = 111							

```
AMO-LDAT -111 LCR-DIRECTIONS
```

```
DISPLAY COMPLETED;
```

```
<DISPLAY-LDAT:TYPE=LCR,LROUTE=555;
```

```
DISPLAY-LDAT:TYPE=LCR,LROUTE=555;
```

```
H500: AMO LDAT STARTED
```

LROUTE = 555 LDPLN NAME = ROPT HIPATH								SERVICE = ALL	
TYPE = LCR								DNNO OF ROUTE = 55	
SERVICE INFO =									
LRTEL	LVAL	TGRP	ODR	LAUTH	SCHEDULE ABCDEFGH	CARRIER	BAND	ZONE	WDTH LATTR
1	1	37	4	1	*****	1	EMPTY	1	NONE
		DNNO = 55							

```
AMO-LDAT -111 LCR-DIRECTIONS
```

```
DISPLAY COMPLETED;
```

```
<
```

```
<DISPLAY-LDAT:TYPE=LCR,LROUTE=37;
```

```
DISPLAY-LDAT:TYPE=LCR,LROUTE=37;
```

```
H500: AMO LDAT STARTED
```

LROUTE = 37 LDPLN NAME = PRI TEST								SERVICE = ALL	
TYPE = LCR								DNNO OF ROUTE = 222	
SERVICE INFO =									
LRTEL	LVAL	TGRP	ODR	LAUTH	SCHEDULE ABCDEFGH	CARRIER	BAND	ZONE	WDTH LATTR
1	1	37	1	1	*****	1	EMPTY	1	NONE

```
AMO-LDAT -111 LCR-DIRECTIONS
```

```
DISPLAY COMPLETED;
```



<DISPLAY-LDAT:TYPE=LCR,LROUTE=38;
DISPLAY-LDAT:TYPE=LCR,LROUTE=38;

H500: AMO LDAT STARTED

LROUTE = 38 LDPLN NAME = PRI							SERVICE = ALL	
TYPE = LCR							DNNO OF ROUTE = 111	
SERVICE INFO =								
LRTEL	LVAL	TGRP	ODR	LAUTH	SCHEDULE	CARRIER	BAND	LATTR
1	1	38	1	1	*****	1	EMPTY	1
		DNNO = 1 -1 -999						NONE

AMO-LDAT -111 LCR-DIRECTIONS
DISPLAY COMPLETED;

<DISPLAY-LDAT:TYPE=LCR,LROUTE=916;
DISPLAY-LDAT:TYPE=LCR,LROUTE=916;

H500: AMO LDAT STARTED

LROUTE = 916 LDPLN NAME = 91650 PSTN							SERVICE = ALL	
TYPE = LCR							DNNO OF ROUTE = 59	
SERVICE INFO =								
LRTEL	LVAL	TGRP	ODR	LAUTH	SCHEDULE	CARRIER	BAND	LATTR
1	1	71	6	1	*****	1	EMPTY	1
		DNNO = 99						NONE

AMO-LDAT -111 LCR-DIRECTIONS
DISPLAY COMPLETED;



RICHT

```
<DISPLAY-RICHT:MODE=LRTE,LRTE=111;
DISPLAY-RICHT:MODE=LRTE,LRTE=111;
H500: AMO RICHT STARTED
+-----+
| LRTE = 111      NAME = ROPT CCM          (NEUTRAL)  SRVC = ALL
| DNNO =          111  DESTNO = 111
| ROUTOPT = YES   REROUT = YES   PLB = NO    FWDBL = NO
| MFV: CNV=FIX    DSP=WITHOUT TEXT=          PULS=PP300
| ROUTENO =      15  BUGS = LIN   ROUTATT = NO  MAINGRP = 15
| INFO =
+-----+
| TGRP = 38 LDAT ETSI CCM          (NEUTRAL)  SUBGROUP = 9 |
+-----+
```

AMO-RICHT-111 TRUNK ROUTING
DISPLAY COMPLETED;

```
<DISPLAY-RICHT:MODE=LRTE,LRTE=555;
DISPLAY-RICHT:MODE=LRTE,LRTE=555;
H500: AMO RICHT STARTED
+-----+
| LRTE = 555      NAME = ROPT HIPATH        (NEUTRAL)  SRVC = ALL
| DNNO =          55   DESTNO = 55
| ROUTOPT = YES   REROUT = YES   PLB = NO    FWDBL = NO
| MFV: CNV=FIX    DSP=WITHOUT TEXT=          PULS=PP300
| ROUTENO =      14  BUGS = LIN   ROUTATT = NO  MAINGRP = 14
| INFO =
+-----+
| TGRP = 37 LDAT PRI TEST          (NEUTRAL)  SUBGROUP = 10 |
+-----+
```

AMO-RICHT-111 TRUNK ROUTING
DISPLAY COMPLETED;

```
<DISPLAY-RICHT:MODE=LRTE,LRTE=37;
DISPLAY-RICHT:MODE=LRTE,LRTE=37;
H500: AMO RICHT STARTED
+-----+
| LRTE = 37       NAME = PRI TEST          (NEUTRAL)  SRVC = ALL
| DNNO =          222
| ROUTOPT = YES   REROUT = YES   PLB = NO    FWDBL = NO
| MFV: CNV=FIX    DSP=WITHOUT TEXT=          PULS=PP300
| ROUTENO =      11  BUGS = LIN   ROUTATT = NO  MAINGRP = 11
| INFO =
+-----+
| TGRP = 37 LDAT PRI TEST          (NEUTRAL)  SUBGROUP = 10 |
+-----+
```

AMO-RICHT-111 TRUNK ROUTING
DISPLAY COMPLETED;



```
<DISPLAY-RICHT:MODE=LRTE , LRTE=38;
DISPLAY-RICHT:MODE=LRTE , LRTE=38;
H500: AMO RICHT STARTED
+-----+
| LRTE = 38      NAME = PRI          (NEUTRAL)  SRVC = ALL
| DNNO =        111
| ROUTOPT = YES    REROUT = YES    PLB = NO      FWDBL = NO
| MFV: CNV=FIX    DSP=WITHOUT TEXT=          PULS=PP300
| ROUTENO =      8  BUGS = LIN   ROUTATT = NO    MAINGRP = 8
| INFO =
+-----+
| TGRP = 38 LDAT ETSI CCM          (NEUTRAL)  SUBGROUP = 9
+-----+
```

AMO-RICHT-111 TRUNK ROUTING
DISPLAY COMPLETED;

PSTN RICHT

```
<DISPLAY-RICHT:MODE=LRTE , LRTE=916;
DISPLAY-RICHT:MODE=LRTE , LRTE=916;
H500: AMO RICHT STARTED
+-----+
| LRTE = 916      NAME = 91650 PSTN      (NEUTRAL)  SRVC = ALL
| DNNO =        59  DESTNO = 59
| ROUTOPT = YES    REROUT = YES    PLB = NO      FWDBL = NO
| MFV: CNV=FIX    DSP=WITHOUT TEXT=          PULS=PP300
| ROUTENO =      20 BUGS = LIN   ROUTATT = NO    MAINGRP = 20
| INFO =
+-----+
| TGRP = 71 LDAT CLOSED NUMBER E1      (NEUTRAL)  SUBGROUP = 19
+-----+
```

AMO-RICHT-111 TRUNK ROUTING
DISPLAY COMPLETED;

<

LCR Out-dial Rules, LODR

```
<DISPLAY-LODR:ODR=4;
DISPLAY-LODR:ODR=4;
H500: AMO LODR STARTED
+-----+
| ODR      POSITION  CMD      PARAMETER
+-----+
| 4        | 1        ECHO      1
|          | 2        ECHO      2
|          | 3        END
+-----+
```

H03: THE NEXT FREE ODR IS 7

AMO-LODR -111 ADMINISTRATION OF LCR OUTDIAL RULES
DISPLAY COMPLETED;



```
<DISPLAY-LODR:ODR=1;
DISPLAY-LODR:ODR=1;
H500: AMO LODR STARTED
+---+
| ODR      POSITION  CMD      PARAMETER |
+---+---+---+---+
|   1       |       1   ECHO      2
|           |       2   END
+---+---+---+---+
| INFO:PSTN
+---+
```

H03: THE NEXT FREE ODR IS 7

```
AMO-LODR -111      ADMINISTRATION OF LCR OUTDIAL RULES
DISPLAY COMPLETED;
```

```
<DISPLAY-LODR:ODR=6;
DISPLAY-LODR:ODR=6;
H500: AMO LODR STARTED
+---+
| ODR      POSITION  CMD      PARAMETER |
+---+---+---+---+
|   6       |       1   ECHO      2
|           |       2   ECHO      3
|           |       3   END
+---+---+---+---+
```

H03: THE NEXT FREE ODR IS 7

```
AMO-LODR -111      ADMINISTRATION OF LCR OUTDIAL RULES
DISPLAY COMPLETED;
```

Name and Number Restrictions:

To use Name and Number Restrictions, the station configuration should be changed so that the parameter SSTNO=Y, (Secret Station Number must be set to Yes).

```
<DISPLAY-SBCSU:STNO=8000;
DISPLAY-SBCSU:STNO=8000;
H500: AMO SBCSU STARTED
```

```
----- USER DATA -----
STNO  =8000    OPT      =OPTI    COS1    =7    DPLN    =0    SPDI    =Y
MAINO =8000    CONN     =DIR     COS2    =7    ITR     =0    SPDC1   =0
PEN    = 1- 1- 55- 1    LCOSV1  =31   COSX    =0    SPDC2   =1
INS    =Y       STD      =3     LCOSV2  =31   SERVID  =0    CBKBMX=5
          SECR     =N     LCOSD1  =31   DSSTNA =N    RCBKB   =N
          SECR     =N     LCOSD2  =31   DSSTNB =Y    RCBKNA =N
SSTNO  =Y       DIGNODIS=N    LCOSD2  =31   PERMACT=    CBKNAMB=Y
TRACE  =N       HFREE    =    ASYNCT  =500   TEXTSEL=ENGLISH
ALARMNO =0      HMUSIC   =0    API     =N    OPTISPA:0    DLAUT   =
EXTBUS =        REP      =0    OPTICOM=N  OPTISPA:0    DLMAN   =
CALLOG =NONE    IDCRL    =N    OPTICA  =0    OPTISOA:0    PRIO    =
          HEADSET  =N    OPTIDA  =0    OPTIABA:0    VPI     =
          HSKEY    =NORMAL  ATMADDR=    PATTERN=    VCI     =
          DFSVCANA=    TFAGRP   =    SPROT    =
DVCFIG =OPTISET TSI     =1    SOPTIDX=    DOPTIDX=    FOPTIDX=    TOPTIDX=    VOPTIDX=
          SOPTIDX=    DOPTIDX=    DPROT    =    FPROT    =    TPROT    =
          SOPTIDX=    DOPTIDX=    DPROT    =    FPROT    =    TPROT    =
          SOPTIDX=    DOPTIDX=    DPROT    =    FPROT    =    TPROT    =
----- ACTIVATION IDENTIFIERS FOR FEATURES -----
```



```
FWDS      :N      FWDT      :N      FWDV      :N      FWDF      :N      FWDD      :N
HTOS      :N      HTOT      :N      HTOV      :N      HTOF      :N      HTOD      :N
DND       :N      VCP       :Y      CWT       :N      TCLOGIN:N
----- FEATURES AND GROUP MEMBERSHIPS -----
ESSTN     :
PUGR      :      HUNTING GROUP   : N
KEYSYS   :N      NIGHT OPTION    : N      ASSOCIATED   STN      : N
----- SUBSCRIBER ATTRIBUTES (AMO SDAT) -----
NONE
-----
```

AMO-SBCSU-111 STATION AND S0-BUS CONFIGURATION OF SWITCHING UNIT
DISPLAY COMPLETED;

<



Cisco Unified CallManager Configuration

Cisco 3745 Gateway Configuration

Cisco Unified CallManager Administration For Cisco IP Telecommunication Solutions Logged in as:CCMAdministrator

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾ Log Off

Gateway Configuration Related Links: Back to MGCP Configuration ▾ Go

Status
 Status: Ready

Device Information

Product	Cisco MGCP E1 Port
Gateway	3745B4_E1
Device Protocol	Digital Access PRI
Registration	Registered with Cisco Unified CallManager CM-Vindaloo
IP Address	172.20.221.200
End-Point Name *	S2/DS1-0@3745B4_E1
Description	S2/DS1-0@3745B4_E1
Device Pool*	Default
Call Classification*	Use System Default
NetworkLocale	< None >
Packet Capture Mode*	None
Packet Capture Duration	60
Media Resource Group List	< None >
Location*	Hub_None
AAR Group	< None >
Load Information	

Transmit UTF-8 for Calling Party Name
 V150 (subset)

Multilevel Precedence and Preemption (MLPP) Information

MLPP Domain	< None >
-------------	----------

MLPP Indication Not available on this device
MLPP Preemption Not available on this device

Interface Information

PRI Protocol Type*	PRI ISO QSIG E1
Protocol Side*	Network
Channel Selection Order*	Top Down
Channel IE Type*	Continuous Number
PCM Type*	A-law
Delay for first restart (1/8 sec ticks)*	32
Delay between restarts (1/8 sec ticks)*	4

Inhibit restarts at PRI initialization
 Enable status poll
 Unattended Port



Call Routing Information - Inbound Calls

Significant Digits *	<input type="text" value="All"/>
Calling Search Space	<input type="text" value="Incoming Trunk"/>
AAR Calling Search Space	<input >"="" none="" type="text" value="<"/>
Prefix DN	<input type="text"/>

Call Routing Information - Outbound Calls

Calling Party Presentation*	<input type="text" value="Default"/>
Calling Party Selection*	<input type="text" value="Originator"/>
Called party IE number type unknown*	<input type="text" value="National"/>
Calling party IE number type unknown*	<input type="text" value="National"/>
Called Numbering Plan*	<input type="text" value="Private"/>
Calling Numbering Plan*	<input type="text" value="Private"/>
Number of digits to strip*	<input type="text" value="0"/>
Caller ID DN	<input type="text"/>
SMDI Base Port*	<input type="text" value="0"/>

PRI Protocol Type Specific Information

Display IE Delivery
 Redirecting Number IE Delivery - Outbound
 Redirecting Number IE Delivery - Inbound
 Send Extra Leading Character in Display IE***
 Setup non-ISDN Progress Indicator IE Enable****
 MCDN Channel Number Extension Bit Set to Zero**
 Send Calling Name In Facility IE
 Interface Identifier Present**

Interface Identifier Value**

Connected Line ID Presentation (QSIG Inbound Call)*

UUIE Configuration

Passing Precedence Level Through UUIE
Security Access Level*

Product Specific Configuration

Line Coding * 

Framing *

Clock *

— —



Partition Configuration

Navigation Cisco Unified CallManager Administration

Cisco Unified CallManager Administration For Cisco IP Telecommunication Solutions Logged in as:CCMAdministrator

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

Find and List Partitions

Status
2 records found

Search Options
Find partition where begins with Search Within Results
(name begins with any)

Search Results

Partition Name	Description
<input type="checkbox"/> Incoming Trunk	Incoming Trunk
<input type="checkbox"/> Phones	Phones

Rows per Page

Calling Search Space

Cisco Unified CallManager Administration For Cisco IP Telecommunication Solutions Logged in as:CCMAdministrator

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

Find and List Calling Search Spaces

Status
3 records found

Search Options
Find where begins with Search Within Results
(name begins with any)

Search Results

CSS Name	Description	Copy
<input type="checkbox"/> Incoming Trunk	3745 E1	
<input type="checkbox"/> Path ReplacementCCS	Path ReplacementCCS	
<input type="checkbox"/> Phones	7960 and 7940	

Rows per Page



Cisco Unified CallManager Administration For Cisco IP Telecommunication Solutions Logged in as:CCMAdministrator

System Call Routing Media Resources Voice Mail Device Application User Management Bulk Administration Help Log Off

Calling Search Space Configuration Related Links: Back To Find/List Go

Status
Status: Ready

Calling Search Space Information

Name * Incoming Trunk

Description 3745 E1

Route Partitions for this Calling Search Space

Available Partitions Phones

Selected Partitions (Ordered by highest priority) Incoming Trunk

Save Delete Copy Add New

Cisco Unified CallManager Administration For Cisco IP Telecommunication Solutions Logged in as:CCMAdministrator

System Call Routing Media Resources Voice Mail Device Application User Management Bulk Administration Help Log Off

Calling Search Space Configuration Related Links: Back To Find/List Go

Status
Status: Ready

Calling Search Space Information

Name * Phones

Description 7960 and 7940

Route Partitions for this Calling Search Space

Available Partitions Incoming Trunk

Selected Partitions (Ordered by highest priority) Phones

Save Delete Copy Add New



Cisco Unified CallManager Administration For Cisco IP Telecommunication Solutions Logged in as:CCMAdministrator

System Call Routing Media Resources Voice Mail Device Application User Management Bulk Administration Help Log off

Calling Search Space Configuration Related Links: Back To Find/List Go

Status
Status: Ready

Calling Search Space Information

Name *	Path ReplacementCCS
Description	Path ReplacementCCS

Route Partitions for this Calling Search Space

Available Partitions

Selected Partitions (Ordered by highest priority)

Incoming Trunk
Phones

Enbloc Route Configuration

Find and List Route Patterns

Status
6 records found

Search Options

Find Route Patterns where begins with Search Within Results
(numplan.dnorpattern begins with any)

Search Results

Pattern	Description	Partition	Route Filter	Associated Device	Copy
222	CCM-Vindaloo to Hicom			S2/DS1-0@3745B4_E1	
555	CCM-Vindaloo to Hipath			S2/DS1-1@3745B4_E1	
5XXX	CCM-Vindaloo to Hipath			S2/DS1-1@3745B4_E1	
8XXX	CCM-Vindaloo to Hicom			S2/DS1-0@3745B4_E1	
9.5	CCM-Vindaloo to Hipath			S2/DS1-1@3745B4_E1	
9.8	CCM-Vindaloo to Hicom			S2/DS1-0@3745B4_E1	

Rows per Page



Route Pattern Configuration

Related Links: [Back To Find/List](#) [Go](#)

Status
(i) Status: Ready

Pattern Definition

Route Pattern*

Route Partition

Description

Numbering Plan

Route Filter

MLPP Precedence*

Gateway/Route List * [\(Edit\)](#) [Find](#)

Route Option Route this pattern
 Block this pattern

Call Classification*

Allow Device Override Provide Outside Dial Tone Allow Overlap Sending Urgent Priority

Require Forced Authorization Code

Authorization Level*

Require Client Matter Code

Calling Party Transformations

Use Calling Party's External Phone Number Mask

Calling Party Transform Mask

Prefix Digits (Outgoing Calls)

Calling Line ID Presentation*

Calling Name Presentation*

Connected Party Transformations

Connected Line ID Presentation*

Connected Name Presentation*

Called Party Transformations

Discard Digits

Called Party Transform Mask

Prefix Digits (Outgoing Calls)

ISDN Network-Specific Facilities Information Element

Network Service Protocol

Carrier Identification Code

Network Service	Service Parameter Name	Service Parameter Value
<input type="text" value="-- Not Selected --"/>	<input type="text" value="< Not Exist >"/>	



Route Pattern Configuration Related Links: [Back To Find/List](#) [Go](#)

Route Pattern Configuration

Status
Status: Ready

Pattern Definition

Route Pattern * Route Partition

Description Numbering Plan

Route Filter MLPP Precedence *

Gateway/Route List *

Route Option Route this pattern Block this pattern

Call Classification * Allow Device Override Provide Outside Dial Tone Allow Overlap Sending Urgent Priority

Require Forced Authorization Code

Authorization Level * Require Client Matter Code

Calling Party Transformations

Use Calling Party's External Phone Number Mask
Calling Party Transform Mask

Prefix Digits (Outgoing Calls)

Calling Line ID Presentation * Calling Name Presentation *

Connected Party Transformations

Connected Line ID Presentation * Connected Name Presentation *

Called Party Transformations

Discard Digits Called Party Transform Mask
Prefix Digits (Outgoing Calls)

ISDN Network-Specific Facilities Information Element

Network Service Protocol Carrier Identification Code

Network Service	Service Parameter Name	Service Parameter Value
<input type="text" value="-- Not Selected --"/>	<input >"="" exist="" not="" type="text" value="<"/>	<input type="text"/>



Cisco Unified CallManager Administration For Cisco IP Telecommunication Solutions

Logged in as:CCMAdministrator

System Call Routing Media Resources Voice Mail Device Application User Management Bulk Administration Help Log Off

Route Pattern Configuration Related Links: Back To Find/List Go

Status
Status: Ready

Pattern Definition

Route Pattern* 5XXX

Route Partition < None >

Description CCM-Vindaloo to Hipath

Numbering Plan -- Not Selected --

Route Filter < None >

MLPP Precedence* Default

Gateway/Route List * S2/DS1-1@3745B4_E1 (Edit) Find

Route Option Route this pattern Block this pattern No Error

Call Classification* OffNet

Allow Device Override Provide Outside Dial Tone Allow Overlap Sending Urgent Priority

Require Forced Authorization Code

Authorization Level* 0

Require Client Matter Code

Calling Party Transformations

Use Calling Party's External Phone Number Mask

Calling Party Transform Mask

Prefix Digits (Outgoing Calls)

Calling Line ID Presentation* Default

Calling Name Presentation* Default

Connected Party Transformations

Connected Line ID Presentation* Default

Connected Name Presentation* Default

Called Party Transformations

Discard Digits < None >

Called Party Transform Mask

Prefix Digits (Outgoing Calls)

ISDN Network-Specific Facilities Information Element

Network Service Protocol -- Not Selected --

Carrier Identification Code

Network Service	Service Parameter Name	Service Parameter Value
-- Not Selected --	< Not Exist >	



Route Pattern Configuration

Related Links: [Back To Find/List](#) [Go](#)

Status
(i) Status: Ready

Pattern Definition

Route Pattern*

Route Partition

Description

Numbering Plan

Route Filter

MLPP Precedence*

Gateway/Route List * [\(Edit\)](#) [Find](#)

Route Option
 Route this pattern
 Block this pattern

Call Classification*

Allow Device Override Provide Outside Dial Tone Allow Overlap Sending Urgent Priority

Require Forced Authorization Code

Authorization Level*

Require Client Matter Code

Calling Party Transformations

Use Calling Party's External Phone Number Mask

Calling Party Transform Mask

Prefix Digits (Outgoing Calls)

Calling Line ID Presentation*

Calling Name Presentation*

Connected Party Transformations

Connected Line ID Presentation*

Connected Name Presentation*

Called Party Transformations

Discard Digits

Called Party Transform Mask

Prefix Digits (Outgoing Calls)

ISDN Network-Specific Facilities Information Element

Network Service Protocol

Carrier Identification Code

Network Service	Service Parameter Name	Service Parameter Value
<input type="text" value="-- Not Selected --"/>	<input type="text" value="< Not Exist >"/>	<input type="text"/>



Overlap Sending Route Pattern Configuration

Route Pattern Configuration Related Links: [Back To Find/List](#) [Go](#)

Status
(i) Status: Ready

Pattern Definition

Route Pattern * Route Partition

Description

Numbering Plan

Route Filter

MLPP Precedence *

Gateway/Route List *

Route Option Route this pattern Block this pattern

Call Classification *

Allow Device Override Provide Outside Dial Tone Allow Overlap Sending Urgent Priority

Require Forced Authorization Code

Authorization Level *

Require Client Matter Code

Calling Party Transformations

Use Calling Party's External Phone Number Mask
Calling Party Transform Mask

Prefix Digits (Outgoing Calls)

Calling Line ID Presentation *

Calling Name Presentation *

Connected Party Transformations

Connected Line ID Presentation *

Connected Name Presentation *

Called Party Transformations

Discard Digits

Called Party Transform Mask

Prefix Digits (Outgoing Calls)

ISDN Network-Specific Facilities Information Element

Network Service Protocol

Carrier Identification Code

Network Service	Service Parameter Name	Service Parameter Value
<input type="button" value="-- Not Selected --"/>	<input type="button" value="< Not Exist >"/>	<input type="text"/>



Route Pattern Configuration

Related Links: [Back To Find/List](#) [Go](#)

Status
(i) Status: Ready

Pattern Definition

Route Pattern *

Route Partition

Description

Numbering Plan

Route Filter

MLPP Precedence *

Gateway/Route List * [\(Edit\)](#) [Find](#)

Route Option
 Route this pattern
 Block this pattern

Call Classification *

Allow Device Override Provide Outside Dial Tone Allow Overlap Sending Urgent Priority

Require Forced Authorization Code

Authorization Level *

Require Client Matter Code

Calling Party Transformations

Use Calling Party's External Phone Number Mask

Calling Party Transform Mask

Prefix Digits (Outgoing Calls)

Calling Line ID Presentation *

Calling Name Presentation *

Connected Party Transformations

Connected Line ID Presentation *

Connected Name Presentation *

Called Party Transformations

Discard Digits

Called Party Transform Mask

Prefix Digits (Outgoing Calls)

ISDN Network-Specific Facilities Information Element

Network Service Protocol

Carrier Identification Code

Network Service	Service Parameter Name	Service Parameter Value
<input type="text" value="-- Not Selected --"/>	<input type="text" value="< Not Exist >"/>	<input type="text"/>



Translation Pattern for Incoming Calls

Translation Pattern Configuration

Related Links: [Back To Find/List](#) [Go](#)

Status
 Status: Ready

Pattern Definition

Translation Pattern: 4XXX
Partition: Incoming Trunk
Description:
Numbering Plan: < None >
Route Filter: < None >
MLPP Precedence*: Default
Calling Search Space: Phones
Route Option:
 Route this pattern
 Block this pattern: No Error
 Provide Outside Dial Tone Urgent Priority

Calling Party Transformations

Use Calling Party's External Phone Number Mask
Calling Party Transform Mask:
Prefix Digits (Outgoing Calls):
Calling Line ID Presentation*: Default
Calling Name Presentation*: Default

Connected Party Transformations

Connected Line ID Presentation*: Default
Connected Name Presentation*: Default

Called Party Transformations

Discard Digits: < None >
Called Party Transform Mask:
Prefix Digits (Outgoing Calls):



CLIR Route Pattern Configuration

Cisco Unified CallManager Administration For Cisco IP Telecommunication Solutions Logged in as:CCMAdministrator

System Call Routing Media Resources Voice Mail Device Application User Management Bulk Administration Help Log Off

Route Pattern Configuration Related Links: Back To Find/List Go

Status
Status: Ready

Pattern Definition

Route Pattern* BXXX

Route Partition < None >

Description CCM-Vindaloo to Hicom

Numbering Plan -- Not Selected --

Route Filter < None >

MLPP Precedence* Default

Gateway/Route List* S2/DS1-0@3745B4_E1

Route Option Route this pattern
 Block this pattern No Error

Call Classification* OffNet

Allow Device Override Provide Outside Dial Tone Allow Overlap Sending Urgent Priority

Require Forced Authorization Code

Authorization Level* 0

Require Client Matter Code

Calling Party Transformations

Use Calling Party's External Phone Number Mask

Calling Party Transform Mask

Prefix Digits (Outgoing Calls)

Calling Line ID Presentation* Restricted

Calling Name Presentation* Default

Connected Party Transformations

Connected Line ID Presentation* Default

Connected Name Presentation* Default

Called Party Transformations

Discard Digits < None >

Called Party Transform Mask

Prefix Digits (Outgoing Calls)

ISDN Network-Specific Facilities Information Element

Network Service Protocol -- Not Selected --

Carrier Identification Code

Network Service	Service Parameter Name	Service Parameter Value
-- Not Selected --	< Not Exist >	



CNIR Route Pattern Configuration

Cisco Unified CallManager Administration For Cisco IP Telecommunication Solutions Logged in as:CCMAdministrator

System Call Routing Media Resources Voice Mail Device Application User Management Bulk Administration Help Log Off

Route Pattern Configuration Related Links: Back To Find/List Go

Status
Status: Ready

Pattern Definition

Route Pattern* BXXX

Route Partition < None >

Description CCM-Vindaloo to Hicom

Numbering Plan -- Not Selected --

Route Filter < None >

MLPP Precedence* Default

Gateway/Route List* S2/DS1-0@3745B4_E1 (Edit) Find

Route Option Route this pattern Block this pattern No Error

Call Classification* OffNet

Allow Device Override Provide Outside Dial Tone Allow Overlap Sending Urgent Priority

Require Forced Authorization Code

Authorization Level* 0

Require Client Matter Code

Calling Party Transformations

Use Calling Party's External Phone Number Mask

Calling Party Transform Mask

Prefix Digits (Outgoing Calls)

Calling Line ID Presentation* Default

Calling Name Presentation* Restricted

Connected Party Transformations

Connected Line ID Presentation* Default

Connected Name Presentation* Default

Called Party Transformations

Discard Digits < None >

Called Party Transform Mask

Prefix Digits (Outgoing Calls)

ISDN Network-Specific Facilities Information Element

Network Service Protocol -- Not Selected --

Carrier Identification Code

Network Service	Service Parameter Name	Service Parameter Value
-- Not Selected --	< Not Exist >	



COLR Translation Pattern Configuration

Translation Pattern Configuration

Related Links: [Back To Find/List](#) [Go](#)

Status
 Status: Ready

Pattern Definition

Translation Pattern	4XXX
Partition	Incoming Trunk
Description	
Numbering Plan	< None >
Route Filter	< None >
MLPP Precedence*	Default
Calling Search Space	Phones
Route Option	<input checked="" type="radio"/> Route this pattern <input type="radio"/> Block this pattern
	<input type="button" value="No Error"/>
<input checked="" type="checkbox"/> Provide Outside Dial Tone <input checked="" type="checkbox"/> Urgent Priority	

Calling Party Transformations

<input type="checkbox"/> Use Calling Party's External Phone Number Mask	
Calling Party Transform Mask	
Prefix Digits (Outgoing Calls)	
Calling Line ID Presentation*	Default
Calling Name Presentation*	Default

Connected Party Transformations

Connected Line ID Presentation*	Restricted
Connected Name Presentation*	Default

Called Party Transformations

Discard Digits	< None >
Called Party Transform Mask	
Prefix Digits (Outgoing Calls)	

ISDN Network-Specific Facilities Information Element

Network Service Protocol	-- Not Selected --	
Carrier Identification Code		
Network Service	Service Parameter Name	Service Parameter Value
-- Not Selected --	< Not Exist >	



CONR Translation Pattern Configuration

Translation Pattern Configuration

Related Links: [Back To Find/List](#) [Go](#)

Status
 Status: Ready

Pattern Definition

Translation Pattern: 4XXX
Partition: Incoming Trunk
Description:
Numbering Plan: < None >
Route Filter: < None >
MLPP Precedence*: Default
Calling Search Space: Phones
Route Option:
 Route this pattern
 Block this pattern: No Error
 Provide Outside Dial Tone
 Urgent Priority

Calling Party Transformations

Use Calling Party's External Phone Number Mask
Calling Party Transform Mask:
Prefix Digits (Outgoing Calls):
Calling Line ID Presentation*: Default
Calling Name Presentation*: Default

Connected Party Transformations

Connected Line ID Presentation*: Default
Connected Name Presentation*: Restricted

Called Party Transformations

Discard Digits: < None >
Called Party Transform Mask:
Prefix Digits (Outgoing Calls):

ISDN Network-Specific Facilities Information Element

Network Service Protocol: -- Not Selected --
Carrier Identification Code:
Network Service: -- Not Selected -- Service Parameter Name: < Not Exist > Service Parameter Value:



CallBack Service Parameters

Clusterwide Parameters (Feature - Call Back)	
<u>Call Back Enabled Flag</u> *	True
<u>Call Back Notification Audio File Name</u> *	CallBack.raw
<u>Connection Proposal Type</u> *	Connection Retention
<u>Connection Response Type</u> *	Default to Connection Retention
<u>Call Back Request Protection T1 Timer</u> *	10
<u>Call Back Recall T3 Timer</u> *	20
<u>Call Back Calling Search Space</u>	< None >
<u>No Path Reservation</u> *	True
<u>Set Private Numbering Plan for Call Back</u> *	False

CallBack Softkey Configuration

Cisco Unified CallManager Administration For Cisco IP Telecommunication Solutions Logged in as:CCMAdministrator

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ BIK Administration ▾ Help ▾ Log off

Softkey Template Configuration Related Links: Configure Softkey Layout ▾ Go



Status
Status: Ready

Softkey Template Information

Name *	Standard Feature-CB
Description	Standard Softkey Template for CM Combined Feature
Applications *	Cisco CallManager

Add Application **Remove Application**



Softkey Template Configuration

Related Links: [Softkey Template Configuration](#) [Go](#)

Status
Status: Ready

Softkey Layout Configuration
Softkey Template: Standard Feature-CB
Select a call state to configure: **Ring Out**

Unselected Softkeys
Undefined (Undefined)

Selected Softkeys (ordered by position)**
**End Call (EndCall)
Direct Transfer (DirTrfr)
Call Back (CallBack)

► ◄ ► ◄

Softkey Template Configuration

Related Links: [Softkey Template Configuration](#) [Go](#)

Status
Status: Ready

Softkey Layout Configuration
Softkey Template: Standard Feature-CB
Select a call state to configure: **On Hook**

Unselected Softkeys
Conference List (ConfList)
Direct Transfer (DirTrfr)
Group Pick Up (GPickUp)
Immediate Divert (Divert)
Join (Join)
Meet Me (MeetMe)
Other Pickup (oPickup)
Pick Up (PickUp)
Quality Report Tool (QRT)
Remove Last Conference Party (RmLstC)
Select (Select)
Undefined (Undefined)
Video Mode Command (VidMode)

Selected Softkeys (ordered by position)**
Redial (Redial)
**NewCall (NewCall)
Forward All (CfwdAll)
Call Back (CallBack)

► ◄ ► ◄



Path Replacement Service Parameters

Clusterwide Parameters (Feature - Path Replacement)

<u>Path Replacement Enabled</u> *	<input type="checkbox"/> True	<input checked="" type="checkbox"/> False
<u>Path Replacement on Tromboned Calls</u> *	<input type="checkbox"/> True	<input checked="" type="checkbox"/> False
<u>Start Path Replacement Minimum Delay Time</u> *	2	0
<u>Start Path Replacement Maximum Delay Time</u> *	10	0
<u>Path Replacement T1 Timer</u> *	30	30
<u>Path Replacement T2 Timer</u> *	15	15
<u>Path Replacement PINX ID</u>	111	
<u>Path Replacement Calling Search Space</u>	Path ReplacementCCS	<input type="checkbox"/>

Call Pick Up Group

Call Pickup Group Information

<u>Call Pickup Group Name</u> *	QSIG PINX ID
<u>Call Pickup Group Number</u> *	111
Description	QSIG PINX ID
Partition	< None >

Associated Call Pickup Group Information

Find Pickup Numbers by Numbers/Partition

Partition	< None >
Call Pickup Group Numbers Contain	<input type="text"/>
Available Call Pickup Groups	(No Matches Found)

Add to Associated Call Pickup Groups

Current Associated Call Pickup Groups

Reverse Order of Selected Numbers	
Selected Call Pickup Groups	111
Removed Call Pickup Groups (to be removed when you click Save)	



Forward by Reroute Service Parameter

Clusterwide Parameters (Feature - Forward)	
<u>Forward Maximum Hop Count</u> *	12
<u>Forward No Answer Timer</u> *	12
<u>Max Forward Hops to DN</u> *	12
<u>Retain Forward Information</u> *	False
<u>Forward By Reroute Enabled</u> *	False
<u>Transform Forward by Reroute Destination</u> *	True
<u>Include Voice Mailbox Address in QSIG Call Diversion APDUs</u> *	False
<u>Always Forward Switch Voice Mail Calls</u> *	True
<u>Forward By Reroute T1 Timer</u> *	10
<u>Include Original Called Info for Q.SIG Call Diversions</u> *	Only after the first diversion



Cisco IP Phone Configuration

Phone Configuration - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Address: https://172.20.221.254/ccmadmin/phoneEdit.do?key=68282778-79c3-44c4-9288-97eec1e3c2a9

Phone Configuration

Status: Ready

Association Information

- 1 [Add Line \[1\] - 4000 in Phones](#)
- 2 [Add a new SD](#)
- 3 [Add Line \[2\] - Add a new DN](#)
- 4 [Add a new SD](#)
- 5 [Add a new SURL](#)
- 6 [Add a new BLF SD](#)
- 7 Privacy
- 8 None

Phone Type: Cisco 7940
Product Type: Cisco 7940
Device Protocol: SCCP

Device Information

Registration	Registered with Cisco Unified CallManager CM-Vindaloo
IP Address	172.20.221.101
MAC Address*	000427D3FFF7
Description	Auto 4000
Device Pool*	Default
Phone Button Template*	Standard 7940 SCCP
Softkey Template	Standard Feature-CB
Common Phone Profile*	Standard Common Phone Profile
Calling Search Space	< None >
AAR Calling Search Space	< None >
Media Resource Group List	< None >
User Hold Audio Source	< None >
Network Hold Audio Source	< None >
Location*	Hub_None
User Locale	English United States
Network Locale	< None >
Built In Bridge*	Default

Done

Start Clarinet - ... Phone Co... Cisco Unifi... Qsig_mon_... http://www... PBX_temp... Siemens_C... untitled - P... 9:39 AM



Privacy*	Default
Owner User ID	< None >
Phone Load Name	
<input checked="" type="checkbox"/> Retry Video Call as Audio	
<input type="checkbox"/> Ignore Presentation Indicators (internal calls only)	
<input checked="" type="checkbox"/> Allow Control of Device from CTI	
Protocol Specific Information	
Packet Capture Mode*	None
Packet Capture Duration	0
Presence Group*	Standard Presence group
SCCP Phone Security Profile*	Standard SCCP Profile for Auto Registration
SUBSCRIBE Calling Search Space	< None >
<input type="checkbox"/> Unattended Port	
<input type="checkbox"/> Require DTMF Reception	
<input type="checkbox"/> RFC2833 Disabled	
External Data Locations Information (Leave blank to use default)	
Information	
Directory	
Messages	
Services	
Authentication Server	
Proxy Server	
Idle	
Idle Timer (seconds)	
Extension Information	
<input type="checkbox"/>	Enable Extension Mobility
Log Out Profile	-- Not Selected --
Login in User ID	< None >
Login in Time	< None >
Log out Time	< None >
Certification Authority Proxy Function (CAPF) Information	
Certificate Operation*	No Pending Operation
Authentication String	
Generate String	
Operation Completes By	2006 : 5 : 19 : 12 (YYYY:MM:DD:HH)
Certificate Operation Status: None	
MLPP Information	
MLPP Domain	< None >
MLPP Indication*	Default
MLPP Preemption*	Default



Secure Shell Information

Secure Shell User	<input type="text"/>
Secure Shell Password	<input type="password"/>

Product Specific Configuration Layout

?

<input type="checkbox"/> Disable Speakerphone	
<input type="checkbox"/> Disable Speakerphone and Headset	
PC Port *	Enabled
Settings Access*	Enabled
Gratuitous ARP*	Enabled
PC Voice VLAN Access*	Enabled
Video Capabilities*	Disabled
Auto Line Select*	Disabled
Web Access*	Enabled

Directory Number Configuration

Related Links: [Back To Find/List](#)

Status
Status: Ready

Note: Changes to Line or Directory Number settings require restart.

Directory Number Information

Directory Number*	<input type="text" value="4000"/>
Route Partition	<input type="text" value="Phones"/>
Description	<input type="text"/>
Alerting Name	<input type="text" value="Vindaloo-00(Alert)"/>
ASCII Alerting Name	<input type="text" value="Vindaloo-00(Alert)"/>

Allow Control of Device from CTI

Associated Devices

SEP000427D3FFF7	Edit Device
	Edit Line Appearance

Dissociate Devices



Directory Number Settings

Voice Mail Profile	<input type="button" value="< None >"/>	(Choose <None> to use system default)
Calling Search Space	<input type="button" value="Phones"/>	
Presence Group*	<input type="button" value="Standard Presence group"/>	
AAR Group	<input type="button" value="< None >"/>	
User Hold Audio Source	<input type="button" value="< None >"/>	
Network Hold Audio Source	<input type="button" value="< None >"/>	
Auto Answer*	<input type="button" value="Auto Answer Off"/>	

Call Forward and Call Pickup Settings

Forward All	<input type="checkbox"/> or <input type="text"/>	Calling Search Space <input type="button" value="Phones"/>
Secondary Calling Search Space for Forward All	<input type="button" value="< None >"/>	
Forward Busy Internal	<input type="checkbox"/> or <input type="text"/>	Phones
Forward Busy External	<input type="checkbox"/> or <input type="text"/>	Phones
Forward No Answer Internal	<input type="checkbox"/> or <input type="text"/>	Phones
Forward No Answer External	<input type="checkbox"/> or <input type="text"/>	Phones
Forward No Coverage Internal	<input type="checkbox"/> or <input type="text"/>	<input type="button" value="< None >"/>
Forward No Coverage External	<input type="checkbox"/> or <input type="text"/>	<input type="button" value="< None >"/>
Forward on CTI Failure	<input type="checkbox"/> or <input type="text"/>	<input type="button" value="< None >"/>
No Answer Ring Duration (seconds)	<input type="text"/>	
Call Pickup Group	<input type="button" value="< None >"/>	

MLPP Alternate Party Settings

Target (Destination)	<input type="text"/>
MLPP Calling Search Space	<input type="button" value="Phones"/>
MLPP No Answer Ring Duration (seconds)	<input type="text"/>

Line 1 on Device SEP000427D3FFF7

Display (Internal Caller ID)	<input type="text" value="Vindaloo-00"/>	Display text for a line appearance is intended for displaying text such as a name instead of a number for internal calls. If you specify a number, the person receiving a call may not see the proper identity of the caller.
ASCII Display (Internal Caller ID)	<input type="text" value="Vindaloo-00"/>	
Line Text Label	<input type="text" value="Vindaloo-00"/>	
ASCII Line Text Label	<input type="text" value="Vindaloo-00"/>	
External Phone Number Mask	<input type="text"/>	
Message Waiting Lamp Policy*	<input type="button" value="Use System Policy"/>	
Ring Setting (Phone Idle)*	<input type="button" value="Ring"/>	
Ring Setting (Phone Active)	<input type="button" value="Use System Default"/>	Applies to this line when any line on the phone has a call in progress.

Multiple Call/Call Waiting Settings on Device SEP000427D3FFF7

Note: The range to select the Max Number of calls is: 1-200

Maximum Number of Calls*	<input type="text" value="4"/>	
Busy Trigger*	<input type="text" value="2"/>	(Less than or equal to Max. Calls)



Forwarded Call Information Display on Device SEP000427D3FFF7

- Caller Name
- Caller Number
- Redirected Number
- Dialed Number

SIP Phone Configuration

Phone Configuration Related Links: [Back To Find/List](#) [Print](#) [Go](#)

Status
i Status: Ready

Association Information

Modify Button Items
1 Line [1] - 4002 in Phones
2 Line [2] - Add a new DN
3 Add a new SD
4 Add a new SD
5 Add a new SD
6 Add a new SD
----- Unassigned Associated Items -----
7 Add a new SD
8 Add a new SURL
9 Add a new BLF SD
10 Privacy
11 None

Phone Type
Product Type: Cisco 7961
Device Protocol: SIP

Device Information

Registration	Registered with Cisco Unified CallManager CM-Vindaloo
IP Address	172.20.221.103
MAC Address*	00170EEE2F9E
Description	Auto 4002
Device Pool*	Default
Phone Button Template*	Standard 7961 SIP
Softkey Template	Standard Feature-CB
Common Phone Profile*	Standard Common Phone Profile
Calling Search Space	< None >
AAR Calling Search Space	< None >
Media Resource Group List	< None >
User Hold Audio Source	< None >
Network Hold Audio Source	< None >
Location*	Hub_None
User Locale	< None >
Network Locale	< None >
Built In Bridge*	Default
Privacy*	Default
Owner User ID	< None >
Phone Load Name	

Ignore Presentation Indicators (internal calls only)
 Allow Control of Device from CTI



Protocol Specific Information	
Packet Capture Mode*	<input type="text" value="None"/>
Packet Capture Duration	<input type="text" value="0"/>
Presence Group*	<input type="text" value="Standard Presence group"/>
SIP Dial Rules	<input type="text" value="< None >"/>
MTP Preferred Originating Codec*	<input type="text" value="711ulaw"/>
SIP Phone Security Profile*	<input type="text" value="Standard SIP Profile for Auto Registration"/>
Rerouting Calling Search Space	<input type="text" value="< None >"/>
SUBSCRIBE Calling Search Space	<input type="text" value="< None >"/>
SIP Profile*	<input type="text" value="Standard SIP Profile"/>
Digest User	<input type="text" value="< None >"/>
<input type="checkbox"/> Media Termination Point Required	
<input type="checkbox"/> Unattended Port	
<input type="checkbox"/> Require DTMF Reception	
External Data Locations Information (Leave blank to use default)	
Information	<input type="text"/>
Directory	<input type="text"/>
Messages	<input type="text"/>
Services	<input type="text"/>
Authentication Server	<input type="text"/>
Proxy Server	<input type="text"/>
Idle	<input type="text"/>
Idle Timer (seconds)	<input type="text"/>
Extension Information	
<input type="checkbox"/> Enable Extension Mobility	
Log Out Profile	<input type="text" value="-- Not Selected --"/>
Login in User ID	<input >="" none="" type="text" value="<"/>
Log in Time	<input >="" none="" type="text" value="<"/>
Log out Time	<input >="" none="" type="text" value="<"/>
Certification Authority Proxy Function (CAPF) Information	
Certificate Operation*	<input type="text" value="No Pending Operation"/>
Authentication String	<input type="text"/>
Generate String	
Operation Completes By	<input type="text" value="2006"/> : <input type="text" value="5"/> : <input type="text" value="20"/> : <input type="text" value="12"/> (YYYY:MM:DD:HH)
Certificate Operation Status: <input type="text" value="None"/>	
MLPP Information	
MLPP Domain	<input >="" none="" type="text" value="<"/>
Secure Shell Information	
Secure Shell User	<input type="text"/>
Secure Shell Password	<input type="text"/>



Product Specific Configuration Layout

?

<input type="checkbox"/> Disable Speakerphone	
<input type="checkbox"/> Disable Speakerphone and Headset	
PC Port *	Enabled
Settings Access *	Enabled
Gratuitous ARP *	Enabled
PC Voice VLAN Access *	Enabled
Video Capabilities *	Disabled
Auto Line Select *	Disabled
Web Access *	Enabled
Span to PC Port *	Disabled
Logging Display *	PC Controlled
Load Server	

Directory Number Configuration

Related Links: [Back To Find/List](#)

Status

Status: Ready

Note: Changes to Line or Directory Number settings require restart.

Directory Number Information

Directory Number *	4002
Route Partition	Phones
Description	SIP
Alerting Name	Vindaloo-SIP-02(Alert)
ASCII Alerting Name	Vindaloo-SIP-02(Alert)

Allow Control of Device from CTI

Associated Devices

SEP00170EEE2F9E	Edit Device
	Edit Line Appearance

▼ ▲

Dissociate Devices



Directory Number Settings

Voice Mail Profile	<input type="button" value="< None >"/>	(Choose <None> to use system default)
Calling Search Space	<input type="button" value="Phones"/>	
Presence Group*	<input type="button" value="Standard Presence group"/>	
AAR Group	<input type="button" value="< None >"/>	
User Hold Audio Source	<input type="button" value="< None >"/>	
Network Hold Audio Source	<input type="button" value="< None >"/>	
Auto Answer*	<input type="button" value="Auto Answer Off"/>	

Call Forward and Call Pickup Settings

Voice Mail Destination	<input type="button" value="Calling Search Space"/>
Forward All	<input type="checkbox"/> or <input type="button" value="Phones"/>
Secondary Calling Search Space for Forward All	<input type="button" value="< None >"/>
Forward Busy Internal	<input type="checkbox"/> or <input type="button" value="Phones"/>
Forward Busy External	<input type="checkbox"/> or <input type="button" value="Phones"/>
Forward No Answer Internal	<input type="checkbox"/> or <input type="button" value="Phones"/>
Forward No Answer External	<input type="checkbox"/> or <input type="button" value="Phones"/>
Forward No Coverage Internal	<input type="checkbox"/> or <input type="button" value="< None >"/>
Forward No Coverage External	<input type="checkbox"/> or <input type="button" value="< None >"/>
Forward on CTI Failure	<input type="checkbox"/> or <input type="button" value="< None >"/>
No Answer Ring Duration (seconds)	<input type="button"/>
Call Pickup Group	<input type="button" value="< None >"/>

MLPP Alternate Party Settings

Target (Destination)	<input type="button"/>
MLPP Calling Search Space	<input type="button" value="< None >"/>
MLPP No Answer Ring Duration (seconds)	<input type="button"/>

Line 1 on Device SEP00170EEE2F9E

Display (Internal Caller ID)	<input type="button" value="Vindaloo-SIP-02"/>	Display text for a line appearance is intended for displaying text such as a name in: number for internal calls. If you specify a number, the person receiving a call may not see the proper identity of the caller.
ASCII Display (Internal Caller ID)	<input type="button" value="Vindaloo-SIP-02"/>	
Line Text Label	<input type="button" value="Vindaloo-SIP-02"/>	
ASCII Line Text Label	<input type="button" value="Vindaloo-SIP-02"/>	
External Phone Number Mask	<input type="button"/>	
Message Waiting Lamp Policy*	<input type="button" value="Use System Policy"/>	
Ring Setting (Phone Idle)*	<input type="button" value="Ring"/>	
Ring Setting (Phone Active)	<input type="button" value="Use System Default"/>	Applies to this line when any line on the phone has a call in progress.



Multiple Call/Call Waiting Settings on Device SEP00170EEE2F9E

Note: The range to select the Max Number of calls is: 1-200

Maximum Number of Calls *

4

Busy Trigger *

2

(Less than or equal to Max. Calls)

Forwarded Call Information Display on Device SEP00170EEE2F9E

Caller Name

Caller Number

Redirected Number

Dialed Number

Voicemail Profile Configuration

Cisco Unified CallManager Administration For Cisco IP Telecommunication Solutions

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ BIA Administration ▾ Help ▾

Voice Mail Profile Configuration Related Links:

Status: Status: Ready

Voice Mail Profile Information

Voice Mail Profile	Unity (used by 4 devices)
Voice Mail Profile Name *	Unity
Description	Default voice messaging profile
Voice Mail Pilot **	4030/Phones
Voice Mail Box Mask	

Make this the default Voice Mail Profile for the System

— [Save](#) [Delete](#) [Copy](#) [Reset](#) [Add New](#) —



Voicemail Pilot Configuration

Navigation Cisco Unified CallManager Administration For Cisco IP Telecommunication Solutions

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾

Voice Mail Pilot Configuration Related Links:

Status
 Status: Ready

Voice Mail Pilot Information

Voice Mail Pilot Number	4030
Calling Search Space	Phones
Description	Unity

Make this the default Voice Mail Pilot for the system

— [Save](#) [Delete](#) [Add New](#) —

Voicemail Ports

Cisco Unified CallManager Administration For Cisco IP Telecommunication Solutions Logged in as:CCMAdministrator

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾ Log off

Find and List Voice Mail Ports

Status
 4 records found

Search Options

Find Voice Mail Port where Device Name Search Within Results
 Select item or enter search text

(device.name begins with any)

Search Results

Device Name	Description	Device Pool	SCCP Security Profile	Status	IP Address	Copy
<input type="checkbox"/> Vindaloo-VI1	Unity VM	Default	Standard SCCP Profile for Auto Registration	Registered with CM-Vindaloo	172.20.239.252	
<input type="checkbox"/> Vindaloo-VI2	Unity VM	Default	Standard SCCP Profile for Auto Registration	Registered with CM-Vindaloo	172.20.239.252	
<input type="checkbox"/> Vindaloo-VI3	Unity VM	Default	Standard SCCP Profile for Auto Registration	Registered with CM-Vindaloo	172.20.239.252	
<input type="checkbox"/> Vindaloo-VI4	Unity VM	Default	Standard SCCP Profile for Auto Registration	Registered with CM-Vindaloo	172.20.239.252	

[Add New](#) [Select All](#) [Clear All](#) [Delete Selected](#) [Reset Selected](#) Rows per Page



Voice Mail Port Configuration Related Links: [Back To Find/List](#) [Go](#)

Status
Status: Ready

Device Information

Registration	Registered with Cisco Unified CallManager CM-Vindaloo
IP Address *	172.20.239.252
Port Name *	Vindaloo-VI1
Description	Unity VM
Device Pool *	Default
Calling Search Space	< None >
AAR Calling Search Space	< None >
Location *	Hub_None
SCCP Phone Security Profile *	Standard SCCP Profile for Auto Registration

Directory Number Information

Directory Number *	4091
Partition	< None >
Calling Search Space	< None >
AAR Group	< None >
Internal Caller ID Display	VoiceMail
Internal Caller ID Display (ASCII format)	VoiceMail
External Number Mask	

Voice Mail Port Configuration Related Links: [Back To Find/List](#) [Go](#)

Status
Status: Ready

Device Information

Registration	Registered with Cisco Unified CallManager CM-Vindaloo
IP Address *	172.20.239.252
Port Name *	Vindaloo-VI2
Description	Unity VM
Device Pool *	Default
Calling Search Space	< None >
AAR Calling Search Space	< None >
Location *	Hub_None
SCCP Phone Security Profile *	Standard SCCP Profile for Auto Registration

Directory Number Information

Directory Number *	4092
Partition	< None >
Calling Search Space	< None >
AAR Group	< None >
Internal Caller ID Display	VoiceMail
Internal Caller ID Display (ASCII format)	VoiceMail
External Number Mask	



Voice Mail Port Configuration Related Links: [Back To Find/List](#) [Go](#)

Status Status: Ready

Device Information

Registration	Registered with Cisco Unified CallManager CM-Vindaloo
IP Address	172.20.239.252
Port Name*	Vindaloo-VI3
Description	Unity VM
Device Pool*	Default
Calling Search Space	< None >
AAR Calling Search Space	< None >
Location*	Hub_None
SCCP Phone Security Profile*	Standard SCCP Profile for Auto Registration

Directory Number Information

Directory Number*	4093
Partition	< None >
Calling Search Space	< None >
AAR Group	< None >
Internal Caller ID Display	VoiceMail
Internal Caller ID Display (ASCII format)	VoiceMail
External Number Mask	

Voice Mail Port Configuration Related Links: [Back To Find/List](#) [Go](#)

Status Status: Ready

Device Information

Registration	Registered with Cisco Unified CallManager CM-Vindaloo
IP Address	172.20.239.252
Port Name*	Vindaloo-VI4
Description	Unity VM
Device Pool*	Default
Calling Search Space	< None >
AAR Calling Search Space	< None >
Location*	Hub_None
SCCP Phone Security Profile*	Standard SCCP Profile for Auto Registration

Directory Number Information

Directory Number*	4094
Partition	< None >
Calling Search Space	< None >
AAR Group	< None >
Internal Caller ID Display	VoiceMail
Internal Caller ID Display (ASCII format)	VoiceMail
External Number Mask	



Voicemail Version

The screenshot shows a Microsoft Internet Explorer window displaying the Cisco Unity System configuration interface. The title bar reads "Cisco Unity - System - Microsoft Internet Explorer". The left sidebar menu under "Configuration" includes "Settings", **Software Versions**, "Recordings", "Contacts", "Phone Languages", and "GUI Languages". The main content area is titled "Software Versions" and lists the following software components and their versions:

Component	Version
Cisco Unity Version	4.1
Build Number	4.1(1)
Windows Server Version	Microsoft Windows 2000 build 2195 (Service Pack 4)
System Administrator DLL	4.1.0.237
AVLOGMGRSRV	4.1.0.111
AVRESLOADERSRV	4.0.4.53
DOH	4.1.0.259
AvResMgr	4.0.3.46
AvMiuSvr	4.1.0.209
AVVIRTUALQUEUESVR	4.0.3.21
AVSASCHEDULERSVR	4.0.4.39
AvRulerSvr	4.0.3.86
AVARBITERSVR	4.1.0.220
AVCONVENGNSVR	4.1.0.146
AvPhraseServerSvr	4.1.0.89
AVPAGERCONNSVR	4.1.0.118
AVFAILURECONNSVR	4.0.3.34
AVCONVMGRSRV	4.1.0.146
AVDOHMMSVR	4.0.4.2
AvStatMonSvr	4.1.0.105
AVTrapSvr	4.1.0.84
AVRSASVR	4.0.4.21

At the bottom of the window, the Cisco Unity logo and "Log off" link are visible, along with the copyright notice "© 1998-2006 Cisco Systems, Inc." The taskbar at the bottom of the screen shows the Cisco Unity window is the active application, along with the "Start" button and the time "2:29 PM".



MWI Configuration

Cisco Unified CallManager Administration For Cisco IP Telecommunication Solutions Logged in as:CCMAdministrator

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾ Log Off

Find and List Message Waiting Numbers

Status
12 records found

Search Options
Find Message Waiting Numbers where **Directory Number** begins with **Find** Search Within Results
and where Message Waiting Indicator is **Both** (numplan.dnorpattern begins with any)

Search Results

	Directory Number	Description	Partition	Calling Search Space	Copy
<input type="checkbox"/>	4038	MWI On	Path ReplacementCCS		
<input type="checkbox"/>	4039	MWI Off	Path ReplacementCCS		

Add New | Select All | Clear All | Delete Selected | Rows per Page **50**

MWI ON

Cisco Unified CallManager Administration For Cisco IP Telecommunication Solutions Logged in as:CCMAdministrator

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾ Log Off

Message Waiting Configuration

Status
Status: Ready

Message Waiting Information

Message Waiting Number*
Partition
Description
Message Waiting Indicator* On Off
Calling Search Space

Save | Delete | Copy | Add New



MWI OFF

Cisco Unified CallManager Administration For Cisco IP Telecommunication Solutions Logged in as:CCMAdministrator

System ▾ Call Routing ▾ Media Resources ▾ Voice Mail ▾ Device ▾ Application ▾ User Management ▾ Bulk Administration ▾ Help ▾ Log Off

Message Waiting Configuration Related Links: Back To Find/List ▾ Go

Status
Status: Ready

Message Waiting Information

Message Waiting Number*	4039
Partition	< None >
Description	MWI Off
Message Waiting Indicator*	<input type="radio"/> on <input checked="" type="radio"/> off
Calling Search Space	Path ReplacementCCS

— [Save](#) [Delete](#) [Copy](#) [Add New](#) —



Cisco 3745 Configuration

Router# shos version

```
Cisco IOS Software, 3700 Software (C3745-IPVOICE-M), Version 12.4(3), RELEASE SOFTWARE (fc2)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2005 by Cisco Systems, Inc.
Compiled Fri 22-Jul-05 03:09 by hqluong
```

```
ROM: System Bootstrap, Version 12.2(8r)T2, RELEASE SOFTWARE (fc1)
```

```
3745B4_E1 uptime is 2 weeks, 6 days, 19 hours, 11 minutes
System returned to ROM by power-on
System image file is "flash:c3745-ipvoice-mz.124-3.bin"
```

```
Cisco 3745 (R7000) processor (revision 2.0) with 241664K/20480K bytes of memory.
Processor board ID JMX0715L08P
R7000 CPU at 350MHz, Implementation 39, Rev 3.3, 256KB L2, 2048KB L3 Cache
2 FastEthernet interfaces
124 Serial interfaces
4 Channelized E1/PRI ports
2 Voice FXS interfaces
DRAM configuration is 64 bits wide with parity disabled.
151K bytes of NVRAM.
125184K bytes of ATA System CompactFlash (Read/Write)
62592K bytes of ATA Slot0 CompactFlash (Read/Write)
Configuration register is 0x2102
```

```
3745B4_E1#
```

Router# show running-config

```
Building configuration...
```

```
Current configuration : 3738 bytes
!
version 12.4
service timestamps debug datetime msec
service timestamps log datetime msec
no service password-encryption
!
hostname 3745B4_E1
!
boot-start-marker
boot system flash:c3745-ipvoice-mz.124-3.bin
boot-end-marker
!
logging buffered 1000000 debugging
!
no aaa new-model
!
resource policy
!
no network-clock-participate slot 1
no network-clock-participate slot 2
voice-card 1
```



```
!  
voice-card 2  
!  
ip subnet-zero  
ip cef  
ip tcp synwait-time 13  
!  
!  
no ip dhcp use vrf connected  
ip dhcp excluded-address 192.168.10.0 192.168.10.60  
ip dhcp excluded-address 192.168.11.0 192.168.11.10  
!  
ip dhcp pool hq-pool-phones  
  network 192.168.10.0 255.255.255.0  
  option 150 ip 192.168.10.50  
  default-router 192.168.10.1  
!  
ip dhcp pool hq-pool-data  
  network 192.168.11.0 255.255.255.0  
  default-router 192.168.11.1  
!  
!  
no ip domain lookup  
ip host whiz 171.69.1.162  
ip host dirt 171.69.1.129  
ip host danube 171.69.17.14  
ip host CM-VINDALOO 172.20.221.254  
ip name-server 172.20.221.254  
ip dhcp-server 192.168.10.1  
isdn switch-type primary-net5  
!  
!  
voice call carrier capacity active  
!  
!  
!  
!  
!  
!  
!  
!  
!  
!  
!  
!  
!  
!  
!  
!  
!  
!  
!  
!  
!  
!  
!  
!  
!  
controller E1 1/0  
pri-group timeslots 1-31 service mgcp  
!  
controller E1 1/1  
pri-group timeslots 1-31 service mgcp  
!
```



```
controller E1 2/0
pri-group timeslots 1-31 service mgcp
!
controller E1 2/1
pri-group timeslots 1-31 service mgcp
!
!
!
interface FastEthernet0/0
ip address 172.20.221.200 255.255.255.0
duplex auto
speed auto
!
interface FastEthernet0/0.10
encapsulation dot1Q 10
no snmp trap link-status
!
interface FastEthernet0/0.11
encapsulation dot1Q 11
ip address 192.168.11.1 255.255.255.0
no snmp trap link-status
!
interface FastEthernet0/1
no ip address
shutdown
duplex auto
speed auto
!
interface Serial1/0:15
no ip address
isdn switch-type primary-net5
isdn incoming-voice voice
isdn bind-l3 ccm-manager
no cdp enable
!
interface Serial1/1:15
no ip address
isdn switch-type primary-net5
isdn protocol-emulate network
isdn incoming-voice voice
isdn bind-l3 ccm-manager
no cdp enable
!
interface Serial2/0:15
no ip address
isdn switch-type primary-qsig
isdn incoming-voice voice
isdn bind-l3 ccm-manager
no cdp enable
!
interface Serial2/1:15
no ip address
isdn switch-type primary-qsig
```



```
isdn protocol-emulate network
isdn incoming-voice voice
isdn T310 120000
isdn bind-l3 ccm-manager
no cdp enable
!
ip classless
ip route 0.0.0.0 0.0.0.0 FastEthernet0/0
ip route 0.0.0.0 0.0.0.0 172.20.221.1
!
ip http server
!
dialer-list 1 protocol ip permit
!
!
!
control-plane
!
!
!
voice-port 1/0:15
!
voice-port 1/1:15
!
voice-port 2/0:15
!
voice-port 2/1:15
!
voice-port 3/0/0
!
voice-port 3/0/1
!
ccm-manager mgcp
ccm-manager music-on-hold
ccm-manager config server CM-VINDALOO
ccm-manager config
!
mgcp
mgcp call-agent CM-Vindaloo 2427 service-type mgcp version 0.1
mgcp dtmf-relay voip codec all mode out-of-band
mgcp rtp unreachable timeout 1000 action notify
mgcp modem passthrough voip mode nse
mgcp package-capability rtp-package
no mgcp package-capability res-package
mgcp package-capability sst-package
no mgcp package-capability fxr-package
mgcp package-capability pre-package
no mgcp timer receive-rtcp
mgcp sdp simple
mgcp fax t38 inhibit
mgcp rtp payload-type g726r16 static
!
mgcp profile default
```



```
!
!
dial-peer cor custom
!
!
!
dial-peer voice 1 pots
  service mgcpapp
  port 2/0:15
!
dial-peer voice 2 pots
  service mgcpapp
  port 2/1:15
!
dial-peer voice 3 pots
  service mgcpapp
  port 3/0/0
!
dial-peer voice 4 pots
  service mgcpapp
  port 3/0/1
!
dial-peer voice 999300 pots
  service mgcpapp
  port 3/0/0
!
dial-peer voice 999301 pots
  service mgcpapp
  port 3/0/1
!
dial-peer voice 5 pots
  service mgcpapp
!
!
line con 0
line aux 0
line vty 0 4
  login
!
!
end
```

3745B4_E1#

sho diag

c3700 IO-Board EEPROM:

Hardware Revision	:	2.0
Top Assy. Part Number	:	800-14462-01
Board Revision	:	B0
Deviation Number	:	0-0
Fab Version	:	03
PCB Serial Number	:	JAD07060M7X
RMA Test History	:	00
RMA Number	:	0-0-0-0
RMA History	:	00



Calibration Data : Minimum: -1 dBmV, Maximum: -1 dBmV
Calibration values : 0xFFFF 0xFFFF 0xFFFF 0xC28B 0x4A4D 0x5830
0x3731 0x354C 0x3038 0x50FF 0xFFFF 0xFFFF
0xFFFF 0xFFFF 0xFFFF 0xFFFF 0xFFFF 0xFFFF
0xFFFF 0x15 0xA3C7 0x8B00 0x0000 0x0161
0x13A5 0x6465 0x1F3F 0x6000 0x0000 0x0200
0x0000 0x0100 0x0001 0x0565 0x25B4 0x4065
0x25B4 0x0065 0x25B3 0xC065 0x25B3 0x8000
0x0000 0x0000 0x0000 0x0200 0x0000 0x0300
0x0000 0x0000 0x0000 0x0000 0x0000 0x0000
0x0000 0x0000 0x0000 0x0000 0x0000 0x0000
0x0000 0x0000 0x0000 0x0200 0x0000 0x0100
0x0000 0x0000 0x0000 0x0000 0x0000 0x0000
0x0000 0x0000 0x0000 0x0000 0x0000 0x0065
0x25B3 0x4065 0x25B3 0x0000 0x0000 0x0000
0x0001 0x09FF 0xFFFF 0xFF00 0x0000 0x0000
0x0000 0x0015 0xA3C7 0x8B00 0x0000 0x0161
0x13A5 0x6465 0x1F3F 0x6000 0x0000 0x0100
0x0000 0x0100 0x0000 0xC665 0x25B5 0xC065
0x25B5 0x8065 0x25B5 0x4065 0x25B5 0x0000
0x0000 0x0000 0x0000 0x0200 0x0000 0x0300
0x0000 0x0000 0x0000 0x0000 0x0000 0x0000
0x0000 0x0000 0x0000 0x0000 0x0000 0x0000
0x0000 0x0000 0x0000 0x0200 0x0000 0x0100
0x0000 0x0000 0x0000 0x0000 0x0000 0x0000
0x0000 0x0000 0x0000 0x0000 0x0000 0x0065
0x25B0 0xC065 0x25B0 0x8000 0x0000 0x0000
0x0001 0x08FF 0xFFFF 0xFF00 0x0000 0x0000
0x0000 0x0015 0xA3C7 0x8B00 0x0000 0x0161
0x7274 0x8065 0x1F3F 0x6000 0x0000 0x0064
0x7832 0xDCAA 0xAAAA 0xAA00 0x0000 0x0000
0x0000 0x0000 0x0000 0x0000 0x0000 0x0000
0x0000 0x6400 0x2D00 0x3700 0x1400 0x1E00
0x0000 0x0200 0x0000 0x0C66 0x0E5D 0xD000
0x0100 0x0060 0x399D 0xD060 0x39A6 0x8460
0x39A4 0x6C00 0x0000 0x0060 0x39A6 0xF400
0x0000 0x0000 0x0000 0x0000 0x0000 0x0064
0x1FC3 0x3065 0x2131 0xB800 0x0000 0x0000
0x0000 0x0000 0x0042 0x4000 0x0000 0x0064
0x7043 0x0C00 0x0000 0x0000 0x0000 0x0000
0x0000 0x0015 0xA3C7

Chassis Serial Number : JMX0715L08P

EEPROM format version 4

EEPROM contents (hex):

0x00: 04 FF 40 02 F8 41 02 00 C0 46 03 20 00 38 7E 01
0x10: 42 42 30 80 00 00 00 02 03 C1 8B 4A 41 44 30
0x20: 37 30 36 30 4D 37 58 03 00 81 00 00 00 00 04 00
0x30: C8 09 FF FF FF FF FF FF FF FF C2 8B 4A 4D 58
0x40: 30 37 31 35 4C 30 38 50 FF FF FF FF FF FF FF FF
0x50: FF
0x60: FF
0x70: FF FF

c3700 Mid-Plane EEPROM:

Hardware Revision : 2.0

Top Assy. Part Number : 800-12289-01

Board Revision : A0





0x40: 30 37 31 35 4C 30 38 50 43 00 50 C3 06 00 0C 30
0x50: D0 1E 50 FF
0x60: FF
0x70: FF FF

Slot 0:

C3745 Mother board 2FE(TX)-3W Port adapter, 2 ports

Port adapter is analyzed

Port adapter insertion time unknown

EEPROM contents at hardware discovery:

PCB Serial Number : JAD071106DY

Processor type : 69

Top Assy. Part Number : 800-15934-02

Board Revision : B0

Fab Part Number : 28-4672-04

Deviation Number : 65535-65535

Manufacturing Test Data : FF FF FF FF FF FF FF FF

RMA Number : 0-0-0-0

RMA History : 00

RMA Test History : 00

Field Diagnostics Data : FF FF FF FF FF FF FF FF

Hardware Revision : 2.0

Fab Version : 04

Chassis Serial Number : JMX0715L08P

Product (FRU) Number : C3745-2FE

EEPROM format version 4

EEPROM contents (hex):

0x00: 04 FF C1 8B 4A 41 44 30 37 31 31 30 36 44 59 09
0x10: 69 40 02 F7 C0 46 03 20 00 3E 3E 02 42 42 30 85
0x20: 1C 12 40 04 80 FF FF FF FF C4 08 FF FF FF FF FF
0x30: FF FF FF 81 00 00 00 00 04 00 03 00 C5 08 FF FF
0x40: FF FF FF FF FF FF 41 02 00 02 04 C2 8B 4A 4D 58
0x50: 30 37 31 35 4C 30 38 50 FF FF FF FF FF FF FF FF
0x60: FF
0x70: FF FF

Slot 1:

High Density Voice Port adapter

Port adapter is analyzed

Port adapter insertion time unknown

EEPROM contents at hardware discovery:

Hardware Revision : 1.1

Top Assy. Part Number : 800-03567-01

Board Revision : G0

Deviation Number : 0-0

Fab Version : 02

PCB Serial Number : JAD06380IBZ

RMA Test History : 00

RMA Number : 0-0-0-0

RMA History : 00

Product (FRU) Number : NM-HDV=

EEPROM format version 4

EEPROM contents (hex):

0x00: 04 FF 40 00 CC 41 01 01 C0 46 03 20 00 0D EF 01
0x10: 42 47 30 80 00 00 00 02 02 C1 8B 4A 41 44 30
0x20: 36 33 38 30 49 42 5A 03 00 81 00 00 00 00 04 00
0x30: FF
0x40: FF
0x50: FF
0x60: FF FF



E1 (2 Port) Multi-Flex Trunk WAN Daughter Card
Hardware revision 1.0 Board revision B0
Serial number 22101697 Part number 800-04479-02
FRU Part Number VWIC-2MFT-E1=

Test history 0x0 RMA number 00-00-00
Connector type PCI
EEPROM format version 1
EEPROM contents (hex):
0x20: 01 23 01 00 01 51 3E C1 50 11 7F 02 00 00 00 00
0x30: 58 00 00 00 00 09 07 00 FF FF FF FF FF FF FF FF FF
0x40: 00 00 00 00 00 00 00 00 FF FF FF FF FF FF FF FF FF
0x50: 00 00 00 00 00 00 00 00 FF FF FF FF FF FF FF FF FF
0x60: 00 00 00 00 00 00 00 00 FF FF FF FF FF FF FF FF FF
0x70: 00 00 00 00 00 00 00 00 FF FF FF FF FF FF FF FF FF
0x80: 00 00 00 00 00 00 00 00 FF FF FF FF FF FF FF FF FF
0x90: 00 00 00 00 00 00 00 00 FF FF FF FF FF FF FF FF FF
0xA0: 00 00 00 00 00 00 00 00 FF FF FF FF FF FF FF FF FF
0xB0: 00 00 00 00 00 00 00 00 FF FF FF FF FF FF FF FF FF
0xC0: 00 00 00 00 00 00 00 00 FF FF FF FF FF FF FF FF FF
0xD0: 00 00 00 00 00 00 00 00 FF FF FF FF FF FF FF FF FF
0xE0: 00 00 00 00 00 00 00 00 FF FF FF FF FF FF FF FF FF
0xF0: 00 00 00 00 00 00 00 00 FF FF FF FF FF FF FF FF FF

HDV firmware: Compiled Fri 19-Nov-04 14:23 by michen
HDV memory size 524280 heap free 141761

Slot 3:

4 PORT Voice PM for MARs Port adapter
Port adapter is analyzed
Port adapter insertion time unknown
EEPROM contents at hardware discovery:
Hardware revision 1.1 Board revision H0
Serial number 25100457 Part number 800-02491-02
FRU Part Number: NM-2V=

Test history 0x0 RMA number 00-00-00
EEPROM format version 1
EEPROM contents (hex):
0x00: 01 65 01 01 01 7F 00 A9 50 09 BB 02 00 00 00 00
0x10: 88 00 00 00 01 03 09 17 FF FF FF FF FF FF FF FF
0x20: 00 00 00 00 00 00 00 00 FF FF FF FF FF FF FF FF
0x30: 00 00 00 00 00 00 00 00 FF FF FF FF FF FF FF FF
0x40: 00 00 00 00 00 00 00 00 FF FF FF FF FF FF FF FF
0x50: 00 00 00 00 00 00 00 00 FF FF FF FF FF FF FF FF
0x60: 00 00 00 00 00 00 00 00 FF FF FF FF FF FF FF FF
0x70: 00 00 00 00 00 00 00 00 FF FF FF FF FF FF FF FF
0x80: 00 00 00 00 00 00 00 00 FF FF FF FF FF FF FF FF
0x90: 00 00 00 00 00 00 00 00 FF FF FF FF FF FF FF FF
0xA0: 00 00 00 00 00 00 00 00 FF FF FF FF FF FF FF FF
0xB0: 00 00 00 00 00 00 00 00 FF FF FF FF FF FF FF FF
0xC0: 00 00 00 00 00 00 00 00 FF FF FF FF FF FF FF FF
0xD0: 00 00 00 00 00 00 00 00 FF FF FF FF FF FF FF FF
0xE0: 00 00 00 00 00 00 00 00 FF FF FF FF FF FF FF FF
0xF0: 00 00 00 00 00 00 00 00 FF FF FF FF FF FF FF FF

VIC Slot 0:

FXS Voice daughter card (2 port)
Hardware revision 1.1 Board revision B0
Serial number 27635018 Part number 800-02493-04
FRU Part Number VIC-2FXS=

Test history 0x0 RMA number 00-00-00
Connector type Wan Module
EEPROM format version 1
EEPROM contents (hex):
0x20: 01 0E 01 01 01 A5 AD 4A 50 09 BD 04 00 00 00 00
0x30: 58 00 00 00 02 06 22 01 FF FF FF FF FF FF FF FF
3745B4_E1#



Acronyms

Acronym	Definitions
ANF-PR	Additional Network Feature Path Replacement
AOC	Advice-of-charge. Information element is sent with the connection setup information for incoming Euro-ISDN connections. The AOC IE is used for call charge calculation.
CCM	Cisco Unified Cisco Unified CallManager
CCBS	Call Completion to Busy Subscriber
CCNR	Call Completion on No Reply
CFB	Call Forwarding on Busy
CFNR	Call Forwarding No Reply
CFU	Call Forwarding Unconditional
CLIP	Calling Line (Number) Identification Presentation
CLIR	Calling Line (Number) Identification Restriction
CMM	Communication Media Module (CMM) is a Cisco Catalyst® 6500 Series and Cisco 7600 Series line card that provides flexible and high-density T1/E1 gateways
CNIP	Calling Name Identification Presentation
CNIR	Calling Name Identification Restriction
COLP	Connected Line (Number) Identification Presentation
COLR	Connected Line (Number) Identification Restriction
CONP	Connected Name Identification Presentation
CONR	Connected Name Identification Restriction
CT	Call Transfer
MWI	Message Waiting Indicator
PSTN	Public Switched Telephone Network



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